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US EPA RECORDS CENTER REGION 5



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Site Inspection Report

United States Postal Service
Aurora Main Post Office Facility
525 North Broadway, Aurora, Illinois
Illinois ID Number: 0890050033
USEPA ID Number: ILD981795453

Prepared for:

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1.0 EXECUTIVE SUMMARY AND INTRODUCTION

The United States Postal Service ("USPS") owns and operates the Aurora Main Post Office ("site") located at 525 North Broadway Avenue, Aurora, Illinois. The site is listed on the Federal Agency Hazardous Waste Compliance Docket under Section 120(c) of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and as amended by Superfund Amendments and Reauthorization Act ("SARA").

The United States Environmental Protection Agency ("USEPA") Region V has requested that the USPS conduct site assessment activities under the authority of CERCLA in order to determine the potential threat to human health and the environment posed by the site and to determine the appropriate corrective actions to be implemented. In correspondence between the USEPA and the USPS, it was determined that an Expanded Site Inspection ("SI") would need to be conducted in order to meet the project objectives. This SI was therefore conducted to determine the potential impact of the previously identified contamination on potentially effected populations. This report has been prepared in accordance with USEPA Document No. EPA540-R-92-021, *"Guidance for Performing Site Inspections Under CERCLA"*, Directive 9345.1-05, September 1992. The SI field work was conducted on July 14, 2006, and July 17, 2006, and included the following activities:

- Advancement of 13 soil borings using direct push technology (Geoprobe® Systems Model 6610DT);
- Collection of one soil sample from each boring location for laboratory analysis;
- Conversion of 3 of the soil boring locations to permanent 2-inch monitoring wells by over-drilling the soil boring location using the hollow stem auger ("HSA") auger attachment for the 6610DT; and
- Collection of 3 sediment and 3 surface water samples from Indian Creek, which is located adjacent to the site along the northern property boundary.

The soil, sediment, surface water and ground water samples were transported to First Environmental Laboratories, Inc. (Naperville, Illinois, Accreditation #100292) under strict chain-of-custody protocols. The samples were analyzed for the following:

Soil/Sediment:

- VOCs: Method 5035/8260B;
- PAHs and SVOCs: method 5035/8270C;
- Total Metals (18): Method 3050B/6010B;
- Mercury: Method 7470A;
- Cyanide: Method 9010B/9014; and
- pH: 9045C.

Ground/Surface Water:

- VOCs: Method 5030B/8260B;
- PAHs and SVOCs: Method 3510C/8270C;
- Total Metals: Method 3010A/6010B;
- Mercury: Method 7470A;
- Cyanide: Method 9010B/9014; and
- pH: 9045C.

The following VOCs and SVOCs were identified in the soil exceeding the method detection limit ("MDL") for the analysis procedure performed (none of the sediment samples exhibited exceedences of the MDL for any of the organic contaminants analyzed):

- 2-Butanone
- Ethylbenzene
- Acenaphthene
- Anthracene
- Benzo(a)anthracene
- Benzo(k)fluoranthene
- Benzo(g,h,i)perylene
- Benzo(a)pyrene
- Chrysene
- Dibenzofuran
- Fluoranthene
- Fluorene
- 2-methylnaphthalene
- Naphthalene
- Phenanthrene
- Pyrene

Since metals are naturally occurring in the soil and sediment, levels in samples were compared to statewide background levels for the Chicago Metropolitan Area developed by Illinois EPA. The following metals were identified in the soil at levels three or more times the applicable background levels:

- Arsenic
- Cadmium
- Chromium
- Copper
- Lead
- Mercury
- Nickel
- Selenium

- Zinc

The following SVOCs were identified in the ground water exceeding the MDL for the analysis procedure performed:

- Benzo(a)anthracene
- Fluorene
- Phenanthrene
- Pyrene

Since metals are naturally occurring in ground water, levels in samples were compared to levels in samples obtained at an upgradient location along the property boundary. The following metals were identified in the ground water at levels three or more times these background levels:

- Arsenic
- Lead

A water well survey was conducted within a four-mile radius of the site. The results of this survey indicate that there is one community water supply well and 14 private and/or industrial use wells located within a one-mile radius of the site. Within the one- to four-mile radius of the site, there are 23 municipal wells, 9 business/commercial wells, 21 irrigation wells, 7 non-community public wells, 1 non-potable water well, 410 private wells, 3 subdivision water supply wells, and 26 other wells of unknown type. The site is not located within the setback zones for these wells nor is it located within a designated wellhead protection area. The potentially affected populations associated with the site are the workers and visitors to the postal facility, the users of nearby potable private water wells, people who consume water from nearby municipal wells and construction workers conducting future excavation in areas of soil contamination.

No SVOCs or VOCs were identified in surface water at levels exceeding the MDL for the analysis procedures performed. Since metals are naturally occurring in surface water, levels in samples were compared to levels in samples obtained at an upstream location along the property boundary. The following metals were identified in the surface water at levels three or more times these background levels:

- Arsenic
 - Beryllium
 - Cadmium
 - Chromium
 - Copper
 - Lead
 - Nickel
 - Zinc
-

There is no concern for the air migration pathway as the source area is completely covered by asphalt and two or more feet of fill material.

The data collected as part of this investigation indicate that the soil, ground water, and surface water at the site have been impacted by VOCs, SVOCs, and metals as a result of operations conducted by the previous owner, Burlington Northern – Santa Fe Railroad. The area of soil and ground water impact appear to be limited to the site and shallow aquifer and are covered by asphalt and concrete. The sediment and surface water of Indian Creek (located adjacent to the site) show elevated levels for metals in the downstream sampling locations (as compared to an upstream sampling location). These downstream samples, however, are not impacted above levels at which standards would likely be applied to the site. Therefore, the area of exceedence of State of Illinois Remedial Objectives does not appear to present a health risk to the potentially affected population (visitors and employees of the postal facility and nearby residences and businesses).

2.0 SITE DESCRIPTION AND REGULATORY HISTORY

The site is approximately 11.5 acres in size and is located at 525 North Broadway Avenue, south of the intersection of North Broadway Avenue and Illinois Street and approximately 530 feet east of the Fox River. The site is located in the SE ¼ NW ¼ NE ¼, Section 22, T 38 N, R 8 E of the Third Principal Meridian, Kane County, Illinois. The approximate coordinates of the site are 41° 45' 54" north latitude and 88° 18' 25" west longitude. Please refer to **Figures 1 and 2, Appendix A** for the site location map and site base map.

2.1 *Site Description*

The site is currently used as the Main Post Office ("MPO") for the City of Aurora. The site topography is generally flat, with a gently sloping grade to the west toward the Fox River. A retaining wall runs along the western property boundary along North Broadway Avenue and the land to the west of the wall drops along a consistent grade approximately 10 feet to a sidewalk. The site is occupied by a large post office building (approximately 50,000 square feet) near the center portion of the property near its western boundary. A vehicle maintenance facility ("VMF", approximately 8,500 square feet) is located in the northeastern portion of the property where postal vehicles are serviced. The VMF building includes four service bays, office and storage space.

A large, fenced surface water retention area (approximately 1.5 acres) is located in the northern portion of the site. This retention area is approximately 5 to 10 feet deep at its deepest point and is vegetated. An access road for Burlington Northern Santa Fe ("BNSF") railroad vehicles exists to the north of the retention area and parallels Indian Creek. The northern property boundary abuts with Indian Creek which is a first order tributary to the Fox River. A concrete channel embankment exists between the access road and Indian Creek. There are two or more feet of fill material overlying contaminated soil on the site. There are no probable points of entry (PPE) to Indian Creek from the site.

The remainder of the site includes asphalt and concrete parking areas for the public, USPS employees and USPS vehicles and vegetated, landscaped areas.

2.2 *Surrounding Land Use*

The land use in the vicinity of the site is exclusively commercial and/or industrial along the North Broadway Avenue corridor. The western side of the property is bounded by North Broadway Avenue, with commercial and industrial properties along the western side of North Broadway, from Pierce Street on the north to Clark Street on the south. Further west of these properties is the Fox River, approximately 530 feet west of the site.

The eastern side of the property is bounded by BNSF property that includes an office and maintenance facility toward the north, a major rail switch yard directly to the east, and a rail

line toward the south. The northern side of the property is bounded by Indian Creek, more industrial properties north of Indian Creek, to Pierce Street. North of Pierce Street is a residential area. The southern side of the property is bounded by a large asphalt parking area associated with the bus and train stations and commercial properties including a restaurant and hotel along the east side of North Broadway Avenue. Further south along North Broadway are a series of mixed commercial and light industrial properties.

Residential properties exist to the north and to the east, but are not located directly adjacent to the site. The nearest residential properties are located across the BNSF railroad tracks, directly adjacent to Lincoln Avenue approximately 1400 feet east of the site. The next nearest residential properties are located across Indian Creek, directly across from commercial and industrial properties along the north side of Pierce Street approximately 1800 feet north of the site.

Please refer to **Figure 7, Appendix A** for an aerial photograph of the site and surrounding properties.

2.3 *Site Development and Regulatory History*

The site was purchased by the USPS in the mid 1980s for redevelopment as a postal facility. Upon purchasing the site, the USPS conducted several stages of investigations to characterize the type, magnitude and extent of contamination and for geophysical soil testing for construction purposes. These investigations began in 1985 and continued until the facility was constructed in 1988. The site has been used continuously since construction was completed as the MPO for the City of Aurora.

The site was previously owned by BNSF (then known as Burlington Northern Railroad). The entire BNSF facility encompassed an estimated 45 to 50 acres of land from Indian Creek in the north to New York Street on the south and encompassing the existing BNSF tracks to the north and east to Wood Street. Please refer to the aerial photograph included as **Figure 7, Appendix A** of this report.

The BNSF facility, when in operation, housed many operations including a large switching yard and round house and railcar and engine manufacturing, maintenance and repair operations. The southern portion of the site has been redeveloped as well and includes a transportation center (bus and train stations), a large parking area, a restaurant (in the restored roundhouse location) and hotels.

The BNSF facility was in operation for approximately 80 years until the property was sold in the mid 1980s. The USPS purchased the northern portion of the facility and the former operations in this portion of the site included the following:

- Brass finishing shop;
- Blacksmith and machine shop;
- Wood machine shop;
- Lumber shed;
- Boiler building;
- Welding shop;
- Wheel shop;
- Coke/coal storage building; and
- Oil tank of unknown size or content.

The BNSF facility was involved in an assessment under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and corrective action activities at the time the site was purchased by the USPS. The USPS and its contractors, Wight and Company, Inc. ("Wight", project architect) and Warzyn Environmental, Inc. ("Warzyn", environmental consultant) became involved with the United States Environmental Protection Agency ("USEPA") and Illinois Environmental Protection Agency ("Illinois EPA") regarding the assessment and corrective action of the site during the construction of the facility.

2.3.1 Summary of CERCLA Assessment and Corrective Actions

Site assessment activities were conducted prior to the development of the site by the USPS from 1985 to 1987 in four separate phases of work. A total of 57 soil borings, 30 temporary ground water sumps, 8 ground water monitoring wells and 28 test pits were conducted at the site as part of these assessments. The purpose of the site assessment was to determine the physical properties of soil at the site for future construction activities, to determine the nature of the geology of the site and to evaluate any potential contamination present.

From these locations, a total of 14 soil samples and 9 ground water samples were obtained for laboratory analysis. The samples were analyzed for volatile organic compounds ("VOCs"), semi-volatile organic compounds ("SVOCs"), metals, petroleum hydrocarbons and polychlorinated biphenols ("PCBs"). The results of these analyses indicate that VOC contamination exists at low concentrations, including trichloroethane ("TCE") and total petroleum hydrocarbons. In addition to the above analysis, free phase petroleum-like product was observed in several of the test pits excavated as part of the site assessment.

The borings encountered bedrock at approximately 10 to 12 feet below ground surface. The materials above the bedrock were comprised of fill materials, sand, silty clay and clay. Ground water occurred above the interface of the bedrock and the sediments above.

According to the Illinois EPA (referenced in the PA Report dated November 17, 1988), 6,135 cubic yards of contaminated soil were disposed at the Settler's Hill Landfill in Batavia, Illinois in July 1987, and 405 cubic yards of contaminated soil was disposed in the same landfill in October 1987. The soil was disposed of as special waste and no records of any laboratory tests have been identified. A review of the Illinois EPA Non-Hazardous Waste Quarterly Report Forms indicates that a total of 10,318 cubic yards of soil waste was disposed in the Third Quarter of 1987 under the same Illinois EPA Site Number. It is inferred from these documents and from the various site reports that the referenced soil disposal originated from the construction of the MPO, the VMF, and the retention pond. Please refer to **Figure 3, Appendix A** of this report for a depiction of these three major areas of soil excavation.

The Illinois EPA, acting under the authority of the USEPA Region V, conducted a CERCLA Preliminary Assessment ("PA") in 1988. The Executive Summary in the PA stated that the site was given a high priority status and recommended immediate site inspection. According to the PA, visual inspections of the site were conducted by the Illinois EPA on July 16, 1986, and on November 17, 1988. Upon completion of the PA Report, the Illinois EPA applied the Hazard Ranking System ("HRS") to the site. In a report dated November 18, 1988, the preliminary HRS score was 26.17 and the projected HRS score was 40.19.

The documents listed below were reviewed in order to develop the site history outlined above. The documents were obtained via various Freedom of Information Act ("FOIA") requests issued to the Illinois EPA and the USEPA and are listed in chronological order:

TABLE 2-1: References Cited for Previous CERCLA Work

REF. NO.	DOCUMENT	DATE	AUTHOR	RECEIVER	COMMENT
1	Report of Site Exploration	12/12/85	Testing Service Corporation ("TSC")	Wight and Co.	Geotechnical testing
2	Letter Report, Soil Contamination Investigation ("SCI")	6/17/86	Warzyn, Inc.	Wight	22 soil borings in the area of the Brass Finishing Shop
3	Meeting between USPS and IEPA	7/16/86	Wight and Co.	Meeting attendees	IEPA concern possible GW contamination
4	SCI, Phase II	7/30/86	Warzyn	Wight	Free product observed
5	Correspondence	8/26/86	Illinois Environmental Protection Agency ("IEPA")	Wight	IEPA response to 6/86 report; requests full delineation
6	Report of ground water ("GW") results from BNSF MW#3	9/9/86	BNSF	IEPA	
7	Correspondence	9/22/86	Wight	IEPA	Additional investigation proposal

8	SCI, Phase III	April, 1987	Warzyn	Wight	5 soil borings and 8 MW's
9	SCI, Phase IV	May, 1987	Warzyn	Wight	28 test pits
10	Memo	6/1/87	Harza Env Inc.	IEPA	IEPA contractor for Phase III report rev.
11	Letter Report	6/10/87	TSC	Wight	Geotech for retention pond
12	Correspondence	6/29/87	Warzyn	IEPA	Tables and figures
13	Correspondence	7/10/87	IEPA	USPS	IEPA reiterates its stance of complete site delineation and remediation
14	Waste Disposal Manifests	9/87 and 10/87	USPS	IEPA	10,316 yd ³ of soil disposed
15	CERCLA PA Report	11/17/88	IEPA	USEPA	Issues high priority status
16	USEPA/IEPA HRS System Prelim/Proj Score Form	11/18/88	IEPA	USEPA	Prelim Score = 26.17 Proj. score = 40.19
17	Federal Sites Docket	12/29/00	USEPA	NA	Copy of docket w/ Aurora MPO
18	E-mail	4/20/01	USEPA	USPS	USEPA request for information under CERCLA
19	Conversation record	7/26/01	DEI	NA	Phone call with Laura Ripley of USEPA which requires SI

These documents are included as reference for USEPA file review and retrieval and copies can be provided upon request.

2.3.2 Leaking Underground Storage Tank Incident

In 1999, a release was identified from the underground storage tank ("UST") system present at the site. On January 27, 1999, one 12,000-gallon gasoline UST, one 1,000-gallon new oil UST and one 2,000-gallon used oil UST and all dispensers and ancillary piping were removed from the VMF portion of the site by R. Carlson & Sons, Inc. of Mokena, Illinois. Evidence of a petroleum release was identified during the removal activities and a release incident was reported to the Illinois Emergency Management Agency ("IEMA"). The release was reported to the Illinois EPA Leaking Underground Storage Tank ("LUST") program and incident number 990183 was assigned to the site.

The following documents associated with this LUST incident were reviewed:

TABLE 2-2: References Cited for LUST Work

DOCUMENT	DATE	AUTHOR	RECEIVER	COMMENT
20-day Report	1/29/99	USPS	IEPA	Notification of release
45-day Report	3/11/99	Roy F Weston, Inc	IEPA	Details of UST removal, release and immediate corrective actions
Letter	3/31/99	IEPA	USPS	45-day receipt letter; full review
Site Characterization Work Plan	3/1/00	Weston	IEPA	Method 2, one physical soil class Well to be installed
Site Characterization Completion Report (SCCR)	9/18/00	Weston	IEPA	Requesting NFR status be assigned to site due to lack of exceedence of Remediation Objectives; lack of ground water and clay soil
Memo	10/20/00	IEPA	Internal	Internal review memo; denial of SCCR request pending submittal of property declaration form and soil analytical results
Letter	11/1/00	IEPA	USPS	SCCR denial based on above
Letter	11/9/00	Weston	IEPA	Denial response with declaration form; soil analytical submitted as part of 45-day report
Memo	11/28/00	IEPA	Internal	Internal review memo; recommends approval of NFR
Letter	12/6/00	IEPA	USPS	NFR approval letter
Letter	3/26/01	IEPA	USPS	Request for copy of NFR letter certified by County Recorder
Letter	4/6/01	USPS	IEPA	Copy of NFR letter certified by Kane County Recorder of Deeds

The documents listed are incorporated by reference only; copies of these documents can be provided to the USEPA upon request

As outlined in the documents above, the LUST incident in question has an NFR letter from the Illinois EPA LUST program recorded to the deed of the property. Some soil contamination was identified during the tank removal including polynuclear aromatic hydrocarbons ("PAHs") and metals. There were no exceedences of the Remediation Objectives ("ROs") as outlined in Title 35, Illinois Administrative Code ("IAC"), Part 742, *Tiered Approach to Corrective Action Objectives* ("TACO"). Additionally, the soil analyses indicated that no VOCs or PCBs are present above the method detection limit ("MDL") for the analyses conducted.

Ground water was sampled and indicated that no contamination exists at the site above the TACO ROs for any chemical tested. The following SW-846 test methods were conducted on the soil (7 samples) and ground water (1 sample). Extraction methods listed were for soil samples only:

- Metals: Methods 3051/6010 for totals, 3015/6010 for SPLP, 7471A for mercury and 9045A for pH;
- PCB: Method 8081;
- PAH: Method 8270C; and
- VOC: Method 8260B.

2.3.3 NPDES Permit

The site has been covered by the general permit for storm water discharges associated with industrial activity under the National Pollutant Discharge Elimination System (“NPDES”) beginning in 1994 and continuing to the present. This permit is for the storm water associated with vehicle maintenance activities at the site. The permit number is ILR003478. A copy can be provided to the USEPA upon request.

2.3.4 RCRA Hazardous Waste Generator Status

The FOIA requests submitted for the site indicate that it is a conditionally exempt small quantity generator (“CESQG”) of hazardous waste under the Resource Conservation and Recovery Act (“RCRA”). The generator status was renewed in 1998 according to the FOIA materials received. The Illinois Bureau of Land waste number is 0894075888 and the USEPA ID number indicated on the 1998 notification form is ILR000030692. Correspondence dated November 5, 1996, from the USPS to the Illinois EPA, including a Notification of Regulated Waste Activity Form, states that the “facility is currently managing its waste at quantities below the Conditionally Exempt Small Quantity Generator Status” but that the facility would like to manifest all waste shipments using the current USEPA ID number. According to the USPS, EPA Form 8700-12 “RCRA Subtitle C Site Identification Form” was submitted to the Illinois EPA providing notice that the facilities hazardous waste generator status is CESQG.

3.0 SITE CONTAMINANTS-OF-CONCERN

Since extensive assessment was previously conducted at the site, the hazardous substances that are contaminants-of-concern (“COCs”) had been previously identified in the soil and ground water. Based upon the previous assessment, the following table lists the COCs for the site.

TABLE 3-1: COCs Identified in Previous CERCLA Work

CHEMICAL	LOCATION ID	MATRIX	DATE	LEVEL ¹	REF. NO.
2-butanone	OW-8	GW ²	Dec-86	6	8
2-methylnaphthalene	B-5	S ³	Dec-86	3700	8
4,6 trinitro-2-methylphenol	OW-5	GW	Dec-86	3	8
Acenaphthylene	B-5	S	Dec-86	6300	8
Anthracene	B-5	S	Dec-86	16000	8
Benzene	OW-5	GW	Dec-86	0.4	8
	B-10	S	May-86	0.16	2
Benzo(a)anthracene	B-5	S	Dec-86	37,000	8
	OW-1	S	Dec-86	140.0	8
Benzo(b)-fluoranthene	B-5	S	Dec-86	23,000	8
	OW-1	S	Dec-86	120.0	8
	B-5	S	Dec-86	23,000	8
	OW-1	S	Dec-86	120.0	8
Benzo[g,h,i]perylene	B-5	S	Dec-86	13,000	8
Benzo(a)pyrene	B-5	S	Dec-86	26,000	8
Bis(2-ethylhexyl)phthalate	OW-5	GW	Dec-86	5.0	8
	OW-7	GW	Dec-86	12.0	8
Chrysene	B-5	S	Dec-86	24,000	8
	OW-1	S	Dec-86	120.0	8
Dibenzo(a,h)-anthracene	B-5	S	Dec-86	5,000	8
Dibenzofuran	B-5	S	Dec-86	4,200	8
diethylphthalate	OW-5	GW	Dec-86	1.0	8
Di-n-butyl phthalate	OW-5	GW	Dec-86	1.0	8
	B-2	S	Dec-86	1,400	8
	B-21	S	May-86	2,600	2
	B-5	S	Dec-86	1,900	8
	OW-1	S	Dec-86	2,300	8
	OW-1	S	Dec-86	1,300	8
Di-n-octyl phthalate	B-10	S	May-86	2,600	2
Ethylbenzene	OW-5	GW	Dec-86	1.0	8
Fluoranthene	B-2	S	Dec-86	33.0	8
	B-5	S	Dec-86	8,400	8
	OW-1	S	Dec-86	22.0	8
	OW-1	S	Dec-86	290.0	8
Fluorene	B-5	S	Dec-86	7,200	8

CHEMICAL	LOCATION ID	MATRIX	DATE	LEVEL ¹	REF. NO.
Indeno(1,2,3-cd)-pyrene	B-5	S	Dec-86	15,000	8
Naphthalene	B-5	S	Dec-86	3,800	8
Phenanthrene	B-15	S	May-86	850 0	2
	B-2	S	Dec-86	73.0	8
	B-5	S	Dec-86	61,000	8
	OW-1	S	Dec-86	200 0	8
Pyrene	B-15	S	May-86	1,100	2
	B-2	S	Dec-86	25.0	8
	B-21	S	May-86	880 0	2
	B-5	S	Dec-86	46,000	8
	OW-1	S	Dec-86	16.0	8
	OW-1	S	Dec-86	230 0	8
Trans-1,2dichloroethene	OW-7	GW	Dec-86	51.0	8
	OW-8	GW	Dec-86	2 0	8
Trichloroethene	OW-3	GW	Dec-86	2.0	8
	OW-7	GW	Dec-86	33.0	8
	OW-8	GW	Dec-86	16.0	8

Notes:

1 – Units in mg/kg for soil and mg/l for water

2 – GW = Ground water

3 – S = Soil

The RCRA priority pollutant metals were also tested in the soil and ground water. Based upon the previously collected analytical data, the chemical groups represented by the COCs listed above are VOCs, SVOCs and metals. This was used as the basis for the analysis procedures outlined in the approved Site Inspection Work Plan ("SIWP").

4.0 SUMMARY OF INVESTIGATION

Field work was conducted at the site on July 14, 2006 and on July 17, 2006 to complete the tasks outlined in the approved work plan dated May 26, 2006. Approval of this work plan was granted by USEPA Region V Project Manager Michael Chrystof in an e-mail dated July 14, 2006. All borings were advanced using a Geoprobe® 6610DT machine. This is a self-propelled, tracked unit which advances probes via a pneumatic hammer. All borings were advanced in this manner. When the monitoring well locations were determined, the 6610DT was fitted with hollow stem auger attachment and the boring location was over-drilled to construct 2-inch diameter monitoring wells.

4.1 *Project QA/QC Methods and Protocols*

All work conducted at the site conformed with the protocols and methodologies outlined in the approved SIWP. Copies of Deuchler Environmental, Inc. ("DEI") Standard Operating Procedures for soil and ground water investigations are included in **Appendix F** of this report for reference.

All soil/sediment and ground/surface water samples obtained from the investigation were analyzed by First Environmental Laboratories, Inc. ("First") located at 1600 Shore Road, Naperville, Illinois. This laboratory is accredited (Accreditation #100292) through both the Illinois Environmental Laboratory Accreditation Program ("IL ELAC") and the USEPA National Environmental Laboratory Accreditation Conference ("NELAC"). Their certificate number is 001532: April 26, 2006, through February 28, 2007. A copy of the laboratory QA/QC protocols is included in **Appendix G** of this report for reference.

4.2 *Summary of Work Performed*

The following work was conducted at the site:

- Advancement of 13 soil borings (designated SB-1 through SB-13) at various locations across the site. Each of the borings were advanced until bedrock was encountered;
- Conversion of three of the borings to permanent, 2-inch diameter PVC monitoring wells. The designations and soil boring locations of the monitoring wells are MW-1/SB-5, MW-2/SB-2 and MW-3/SB-9;
- Collection of three sediment samples directly from Indian Creek, which is located directly adjacent to the northern property boundary of the site; and
- Collection of three surface water samples from Indian Creek.

Additionally, all borings and monitoring wells were surveyed to calculate their vertical and horizontal position. The survey was conducted using GPS technology with accuracies of 3-inches in the horizontal plane and 0.01-inch in the vertical plane. The ground surface

horizontal coordinates and elevation were obtained from each boring location. At the three monitoring well locations, the top of the PVC casing elevation was recorded, in addition to the horizontal coordinates and ground surface elevation.

4.3 Work Plan Deviations

Due to conditions present at the site, certain deviations from the work plan were made. These deviations did not impact the validity of the investigation nor prevent the investigation from meeting its stated objectives. There were no deviations from the QA/QC protocols or investigation methodologies. The work plan deviations are described in detail below.

4.3.1 Relocation of MW-2/SB-2

The monitoring well/boring location MW-2/SB-2 was moved from the area indicated on **Figure 4** in the SIWP to the location depicted on **Figure 3** of this report. The reason for this modification was due to the steep slope that exists in the originally proposed area. The slope of the ground from the grassy area to the sidewalk was too great for the 6610DT to properly operate. Therefore, due to the proximity of underground utilities near the sidewalk area, the location of MW-2/SB-2 was moved to a midpoint in the asphalt parking lot area for the USPS facility.

The purpose of MW-2/SB-2 is to be a downgradient monitoring/sampling control point for the site. Its relocation still serves this purpose and is considered to be a valid and proper location for the monitoring well/soil boring.

4.3.2 Monitoring Well Construction at the SB-3 and SB-4 Locations

The SIWP originally proposed monitoring wells to be constructed at the SB-3 and SB-4 boring locations. In conducting both of these borings, ground water was not encountered. Therefore monitoring wells could not be constructed in those locations. Consideration was given to constructing a monitoring well east of the retaining wall that exists at the site, within the asphalt parking area on the north side of the USPS building. However, existence of underground utilities (electric, gas, sewer and water lines) precluded drilling in this area.

4.3.3 Relocation of MW-1

The SIWP originally called for a monitoring well (MW-1) to be constructed at the SB-1 boring location. However, ground water was not encountered at this location, so a monitoring well could not be constructed. When advancing soil boring SB-5, which is located directly to the south of SB-1, ground water was encountered in sufficient quantities to justify the construction of a monitoring well. The purpose of MW-1 was to serve as an upgradient monitoring/sampling control point at the site, and construction of a monitoring well at the SB-5 location adequately meets this purpose.

4.3.4 Addition of MW-3 at the SB-9 Location

In order to minimally characterize the hydrogeology of the site, a third monitoring well needed to be constructed since the monitoring wells proposed for the SB-3 and SB-4 locations could not be constructed. During advancement of SB-9, obvious signs (visual staining and hydrocarbon odor) of contamination were identified. Considering this fact, a monitoring well was constructed at this location. The rationale behind this decision was to quantify potential ground water contamination at this location and to provide monitoring/sampling control at a location that would either be laterally gradient and/or downgradient of the suspected sources of contamination at the site.

4.3.5 Addition of SB-13

Operating under the assumption that the soil and ground water at the MW-3/SB-9 location would be contaminated to some degree, a control point between this location and Indian Creek was thought to be necessary. Since monitoring wells were not constructed at the SB-3 and SB-4 locations, construction of an additional boring and monitoring well at this point is within the scope of the SIWP.

Considering the configuration of the former welding shop, and also considering the proximity of surface water retention area and the BNSF access road, the location chosen to construct the boring/monitoring well was within the fenced area of the retention pond, on the north side, within the former welding shop location. Three attempts were made to advance the boring to bedrock in an area yielding ground water. Each boring was advanced to bedrock, with none of them yielding any ground water. A decision was made to collect a soil sample from the last boring location for laboratory analysis. A fourth attempt was made to advance a boring that would encounter ground water outside of the fenced area of the retention pond, adjacent to the BNSF access road approximately 20 feet from Indian Creek to no avail.

4.3.6 Indian Creek Sediment Samples

The approved SIWP indicated that Indian Creek sediment samples from the SED-2 and SED-3 locations would be obtained through vertical borings conducted directly adjacent to the creek, with the samples obtained from the depth interval equivalent to the elevation of the creek bed. This proposal was made because at the time that the SIWP was drafted, Indian Creek was at very high flow and due to the characteristics of the large cobbles in the creek bed. At the time the field work for this investigation was conducted however, the flow of Indian Creek was greatly reduced which allowed field personnel to move the large cobbles in order to obtain representative sediment samples directly from the creek bed. Therefore, the creek sediment samples were obtained directly from the creek channel.

5.0 SITE AND AREA GEOLOGY AND HYDROGEOLOGY

Information was collected from published literature, local water well logs and historical boring logs to assess the geology in the vicinity of the site. The nature of the site geology (e.g., consistency, continuity, depth of units, thickness, conductivity, etc.) is a key factor in establishing contaminant fate and transport characteristics and therefore risk associated with contamination in the subsurface.

5.1 Area Geology

The Illinois State Geological Survey ("ISGS") Circular 460, titled "*Surficial Geology of the Chicago Region*" (H. B. Hillman and J. A. Lineback, 1970) was reviewed for information pertaining to the general surficial geology of the area. According to the ISGS Circular 460, the property is situated in the Cahokia Alluvium System. This system generally consists of deposits in floodplains and channels of modern rivers and streams. These deposits consist of mostly poorly sorted silt and sand containing local deposits of sandy gravel, and in many places overlies relatively well sorted glacial outwash of the Henry Formation.

Below the Cahokia Alluvium System in the area, bedrock is typically encountered within 10 to 20 feet of the ground surface. According to the ISGS *Handbook of Illinois Stratigraphy* (H.B. Willman et. al., 1975), the surface of the bedrock under the site is comprised of the Silurian System starting with portions of the Alexandrian Series. The Silurian System in this area tends to be comprised of undifferentiated Joliet-Kankakee, Elwood and Wilhelmi Formations. These formations are all comprised of fine-grained sedimentary rocks including shale, dolomite and chert. The Wilhelmi Formation is often absent in the transition to the Ordovician Maquoketa Group. These formations are fine-grained dolomite and dolomitic shale and may have relatively large nodules of chert present.

Underlying the Silurian System in the area of the site is the Ordovician System starting with the Maquoketa Group. According to ISGS Circular 547, titled "*Facies Analysis of the Ordovician Maquoketa Group and Adjacent Strata in Kane County, Northeastern Illinois*" (Anne M. Graese, 1991) the Maquoketa Group consists of olive-gray and greenish gray shale with interbedded dolomite and limestone.

The remaining portions of the Ordovician System generally present in this area are the Galena and Platteville Groups (fine to medium grained dolomite, with some limestone and chert with interbedded shale at its base) followed by the Glenwood Formation (interbedded shale and dolomite) and the Ancell Group primarily comprised of the St. Peter Formation (sandstone). The Ordovician System is underlain by the Cambrian and Precambrian Systems. The stratigraphy of the area is summarized in the table below:

TABLE 5-1: Area Geology

SYSTEM	GROUP	FORMATION	SEDIMENT/ ROCK TYPE	AVERAGE THICKNESS (feet)	COMMENT
Quaternary		Cahokia Alluvium	Fine grained sand and silts, some Gravel	5 - 10	Depositional materials from the modern Fox River and Indian Creek
Silurian – Niagran Series		Joliet Kankakee Elwood Wilhelmi	Fine grained dolomite transitioning to dolomitic shale with some chert	100 to 120	Tends to be undifferentiated in this area with the Wilhelm thin or absent
Ordovician	Maquoketa		Shale, interbedded with dolomite and limestone	150	
	Galena		Dolomite	330 - 375	Tends to be undifferentiated; active subterranean mine 3 mi north of site
	Platteville		Dolomite		
	Ancell	Glenwood	Poorly sorted sandstone, shaley dolomite and shale	50	
		St. Peter	Sandstone	250	Class I aquifer
Cambrian		Eminence	Dolomite, Dolomitic Sandstone	< 50	
		Potosi	Dolomite	< 100	
		Franconia	Dolomite, Dolomitic Sandstone	100	
		Ironton-Galesville	Sandstone	100 to 150	Class I aquifer
		Eau Claire	Dolomite, Dol. Sandstone, Shale	400 +	
		Mt. Simon	Sandstone	2500	Class I aquifer
Precambrian					

Most of the potable wells in the area produce water from either the St. Peter Formation or the Mt. Simon Formation. The majority of wells located within the 4-mile target distance limit (TDL) of the site produce water from the Silurian-Ordovician System.

5.2 *Site Geology and Hydrogeology*

Please refer to **Appendix C** of this report for all soil boring logs and monitoring well construction details.

The soil borings and monitoring wells that were constructed as part of this investigation indicate that the Silurian dolomite bedrock was encountered at depths ranging from 4.5 to 15 feet bgs. The bedrock was typical of the Niagran Series dolomites in the area and was fine-grained, brown dolomite. The bedrock was cherty in the area of SB-1, SB-5 and SB-13.

The materials encountered above the bedrock across the site can be characterized in three different categories as described below.

5.2.1 **Fill Material**

Fill material was placed at the site to varying depths by human activities and cannot be characterized as native materials. The fill material to a depth of approximately 2 to 3 feet bgs in areas of asphalt cover is characterized as medium sand base material. In other areas of the site the fill material to this depth is a loamy soil in nature. Other areas of fill materials were identified ranging from 2 to 7.5 feet bgs of varying composition. These fill materials included a loose sandy to silty clay matrix with various debris including brick fragments, glass, wood, combusted materials and plant materials. This type of fill was identified in borings SB-2, SB-3, SB-6, SB-9 and SB-10.

At boring SB-11 the entire section to bedrock (7.5 feet bgs) was an oily, black sand fill material with a petroleum odor. It is suspected that the fill material in this boring represents the sand backfill around the former tank. Additionally, a very thin (less than 1-inch) seam of black combusted material was identified in SB-13.

5.2.2 **Silty Clay**

A layer of brown to gray silty clay was identified in all borings conducted at the site except for SB-3, SB-7 and SB-11. This clay layer ranged in depth from 2 to 12 feet bgs and varied from dry (stiff) to moist (plastic). The bottom portion of this stratum is characterized by being brown in color, more moist than above and a higher content of sand.

5.2.3 **Sandy Clay**

In all boring locations except for SB-1, SB-3, SB-4, SB-8 and SB-13 a brown, plastic sandy clay layer was present. This stratum is characterized by a relatively high content of fine, brown sand that was wet in every boring location encountered. This stratum lies directly over bedrock, with the bedrock acting as a confining layer causing it to become saturated.

5.2.4 Ground Water Occurrence

Ground water was present in boring locations SB-2, SB-5, SB-6 through SB-9 and in SB-12. This corresponded directly with the presence of the sandy clay layer described above. Monitoring wells were installed in SB-5 (MW-1), SB-2 (MW-2) and SB-9 (MW-3). The depth to ground water in the borings ranged from 7 feet bgs in SB-2 to 10.5 feet bgs in SB-9. The depth to water and corresponding ground water elevations were as follows:

- MW-1/SB-5: 6.82 feet bgs and 638.02 feet above mean sea level;
- MW-2/SB-2: 13.00 feet bgs and 632.60 feet; and
- MW-3/SB-9: 7.72 feet bgs and 636.62 feet.

The data indicate that the ground water flow direction at the site is to the west-southwest toward the Fox River and the average hydraulic gradient at the site is **0.0074 ft/ft**. Please refer to **Figure 4, Appendix A** for the ground water elevations and flow map.

6.0 CONTAMINANT ANALYSIS RESULTS

As part of the site investigation, soil and ground water samples were obtained from various locations and sediment and surface water samples were obtained from Indian Creek. Soil and ground water contamination was identified during previous investigations conducted at the site. The purpose of this investigation was to confirm the presence of hazardous substances; characterize the source of hazardous substances; identify the area of observed contamination for the soil exposure pathway; determine if there are any observed releases of hazardous substances to ground water and surface water; and to determine if site contamination poses a risk to human health and the environment.

There are three factors that will be evaluated in this section. First, it will be determined whether or not previous site activities have caused contamination from SVOCs and VOCs in levels above the method detection limits (“MDLs”) for the laboratory analysis procedures conducted. Second, it will be determined whether or not previous site activities have caused contamination from metals in levels that significantly exceed appropriate background levels. Finally, levels will be compared to existing State of Illinois remediation objectives (“ROs”) to determine the potential risk posed by that contamination to potentially effected populations..

6.1 *Laboratory Analysis Methods*

The laboratory analysis methods applied to the samples collected at the site were chosen to encompass the COCs outlined in the approved SIWP. All samples were forwarded to First Environmental Laboratories, Inc. (Naperville, Illinois) for analysis under strict chain-of-custody protocols. A copy of the laboratory QA/QC procedures is included in **Appendix G** of this report.

6.1.1 Soil and Sediment Analysis Methods

The following analysis methods were conducted on the soil and creek bed sediment samples collected at the site:

- VOCs: Method 5035/8260B;
- PAHs and SVOCs: Method 5035/8270C;
- Total Metals (18): Method 3050B/6010B;
- Mercury: Method 7470A;
- Cyanide: Method 9010B/9014; and
- pH: 9045C.

6.1.2 Ground and Surface Water Analysis Methods

The following analysis methods were conducted on the ground and surface water samples collected at the site:

- VOCs: Method 5030B/8260B;
- PAHs and SVOCs: Method 3510C/8270C;
- Total Metals: Method 3010A/6010B;
- Mercury: Method 7470A;
- Cyanide: Method 9010B/9014
- pH: 9045C

6.2 Soil and Sediment Analysis Results

Contamination of the soil was identified in some of the samples obtained from the borings at the site including VOCs, SVOCs and metals.

6.2.1 Soil Contamination

Since VOCs and SVOCs are not naturally occurring in soil, any level detected above the detection limit is considered evidence of contamination. The following table outlines the VOCs and SVOCs identified in the soil samples obtained at the site at levels above the MDLs:

Table 6-1: VOCs/SVOCs Present In Soil Above MDLs

CHEMICAL	CLASS	BORING ID	DEPTH (ft. bgs)	MDL (mg/kg)	LEVEL IDENTIFIED (mg/kg)
2-Butanone	VOC	SB-9	8-10	0.010	0.0136
		SB-11	4-8	0.010	0.0113
Ethylbenzene	VOC	SB-11	4-8	0.005	0.0083
Acenaphthene	SVOC	SB-9	8-10	0.330	0.744
		SB-11	4-8	0.330	6.250
Anthracene	SVOC	SB-9	8-10	0.330	1.040
		SB-11	4-8	0.330	21.400
Benzo(a)anthracene	SVOC	SB-11	4-8	0.330	13.900
Benzo(k)fluoranthene	SVOC	SB-11	4-8	0.330	2.280
Benzo(g,h,i)perylene	SVOC	SB-11	4-8	0.330	4.520

CHEMICAL	CLASS	BORING ID	DEPTH (ft. bgs)	MDL (mg/kg)	LEVEL IDENTIFIED (mg/kg)
Benzo(a)pyrene	SVOC	SB-6	2-4	0.090	0.209
	SVOC	SB-8	4-8	0.090	0.119
	SVOC	SB-11	4-8	0.090	8.53
	SVOC	SB-13	0-4	0.090	0.162
Chrysene	SVOC	SB-6	2-4	0.330	0.679
	SVOC	SB-9	8-10	0.330	0.427
	SVOC	SB-11	4-8	0.330	30.800
	SVOC	SB-12	4-8	0.330	0.587
	SVOC	SB-13	0-4	0.330	0.525
Dibenzofuran	SVOC	SB-11	4-8	0.330	3.830
Fluoranthene	SVOC	SB-6	2-4	0.330	0.529
		SB-8	4-8	0.330	0.419
		SB-11	4-8	0.330	5.890
Fluorene	SVOC	SB-9	8-10	0.330	0.722
		SB-11	4-8	0.330	11.900
2-methylnaphthalene	SVOC	SB-11	4-8	0.330	62.300
Naphthalene	SVOC	SB-11	4-8	0.330	5.860
Phenanthrene	SVOC	SB-6	2-4	0.330	0.692
	SVOC	SB-8	4-8	0.330	0.434
	SVOC	SB-9	8-10	0.330	3.730
	SVOC	SB-11	4-8	0.330	108.00
	SVOC	SB-13	0-4	0.330	0.617
Pyrene	SVOC	SB-6	2-4	0.330	0.448
	SVOC	SB-9	8-10	0.330	0.988
	SVOC	SB-11	4-8	0.330	59.30
	SVOC	SB-12	4-8	0.330	0.420

Metals were identified in all soil samples obtained at the site. Levels in samples were compared to statewide background levels established by the Illinois EPA for the Chicago Metropolitan Area. These statewide background levels are found in Title 35 of the Illinois Administrative Code ("IAC"), Subtitle G, Part 742, "Tiered Approach to Corrective Action Objectives" ("TACO"). The following table outlines the metals identified in the soil samples obtained at the site at levels three times or more above the background levels:

Table 6-2: Metals Present Significantly Above Background Levels in Soil

CHEMICAL	BORING ID	DEPTH (ft. bgs)	MDL (mg/kg)	BACKGROUND LEVEL (mg/kg)	LEVEL IDENTIFIED (mg/kg)
Arsenic	SB-6	2-4	0.2	13.0	43.10
	SB-8	4-8	0.2	13.0	44.40
	SB-9	8-10	0.2	13.0	39.30
Cadmium	SB-9	8-10	0.1	0.60	2.40
	SB-13	0-4	0.1	0.60	3.00
Chromium	SB-12	4-8	0.1	16.2	106.00
Copper	SB-6	2-4	0.1	19.6	92.20
	SB-8	4-8	0.1	19.6	228.00
	SB-9	8-10	0.1	19.6	190.00
	SB-12	4-8	0.1	19.6	256.00
	SB-13	0-4	0.1	19.6	114.00
Lead	SB-8	4-8	0.1	36.0	259.00
	SB-9	8-10	0.1	36.0	411.00
	SB-12	4-8	0.1	36.0	2630.00
	SB-13	0-4	0.1	36.0	325.00
Mercury	SB-6	2-4	0.1	0.06	0.21
	SB-8	4-8	0.1	0.06	0.18
Nickel	SB-6	2-4	0.1	18.0	53.00
	SB-8	4-8	0.1	18.0	36.50
	SB-11	4-8	0.1	18.0	90.80
Selenium	SB-6	2-4	0.1	0.48	5.30
	SB-8	4-8	0.1	0.48	1.70
	SB-9	8-10	0.1	0.48	1.80
	SB-13	0-4	0.1	0.48	3.00
Zinc	SB-8	4-8	0.1	95.0	323.00
	SB-9	8-10	0.1	95.0	334.00
	SB-12	4-8	0.1	95.0	626.00
	SB-13	0-4	0.1	95.0	319.00

6.2.2 Sediment Contamination in Indian Creek

None of the sediment samples obtained from Indian Creek exhibited contamination in excess of the MDLs for VOCs and SVOCs. Metals were identified in all sediment samples obtained at the site. Since there are no background levels for sediment, for comparison purposes only the levels in sediment were compared statewide background levels for soil established by the Illinois EPA for the Chicago Metropolitan Area. Only one sediment sample contained a metal concentration that was more than three times the background level for soil. The level of copper at SED-2 was 228 mg/kg, which is significantly higher than the statewide background level for soil.

6.2.3 Soil and Sediment Contamination Above ROs

A number of the soil samples exhibited exceedences of State of Illinois ROs. The ROs used for comparison are found in Title 35 of the Illinois Administrative Code ("IAC"), Subtitle G, Part 742, *"Tiered Approach to Corrective Action Objectives"* ("TACO"). The ROs established in TACO are part of a risk-based approach to site assessment and remediation. They are health based and use the toxicity and exposure values outlined by the federal risk-based corrective action guidelines. Other ROs can be applied to the site at a later date should the USEPA wish.

Of the constituents outlined in Table 6.1 and 6.2 above, five exceed at least one TACO RO. Those contaminants are listed in the following table:

Table 6-3: Soil and Sediment RO Exceedences

CHEMICAL	CLASS	BORING ID	DEPTH (ft, bgs)	LOWEST RO (mg/kg)	LEVEL IDENTIFIED (mg/kg)
Benzo(a)anthracene	SVOC	SB-11	4-8	0.090	13.90
Benzo(a)pyrene	SVOC	SB-6	2-4	0.090	0.209
	SVOC	SB-8	4-8	0.090	0.119
	SVOC	SB-11	4-8	0.090	8.53
	SVOC	SB-13	0-4	0.090	0.162
Naphthalene	SVOC	SB-11	4-8	1.80	5.860
Arsenic	Metal	SB-6	2-4	13.0	43.10
	Metal	SB-8	4-8	13.0	44.40
	Metal	SB-9	8-10	13.0	39.30
	Metal	SB-13	0-4	13.0	31.80
Lead	Metal	SB-9	8-10	400.0	411.0
	Metal	SB-12	4-8	400.0	2,630.0

Due to the fact that the total lead result from SB-12 was an order of magnitude higher than the lead results in the other soil borings, the laboratory was contacted and instructed to conduct a Toxicity Characteristic Leaching Procedure ("TCLP", USEPA Method 1311) on the sample. The result of this test was 0.003 mg/l (MDL was 0.002 mg/l). This level is below the State of Illinois limit for characteristic hazardous waste for lead (5.0 mg/l).

There were no RO exceedences for VOCs, SVOCs or metals in any of the Indian Creek sediment samples obtained. There were no RO exceedences for VOCs in any of the soil samples obtained.

6.2.4 Area of Observed Contamination

The area of soil contamination is depicted on **Figure 6, Appendix A**. This area corresponds with the areas of the site that were not excavated as part of the site remediation and facility construction conducted in 1987 and 1988. Additionally, this area corresponds directly with the following former BNSF buildings that are suspected sources of site contamination:

POTENTIAL SOURCE	BORINGS	DEPTH (ft. bgs)	COC > MDL ONLY	COC > RO
Former Boiler Building	SB-12	4-8	pyrene	lead
Lumber Shop	SB-8	4-8	fluoranthene, phenanthrene	benzo(a)pyrene, arsenic
Welding Shop	SB-9	8-10	2-butanone, anthracene, chrysene, fluorene, phenanthrene, pyrene	arsenic, lead
	SB-13	0-4	chrysene, phenanthrene	lead
Coke/coal Storage Building	SB-6	2-4	chrysene, fluoranthene, phenanthrene, pyrene	arsenic
Former Oil Tank	SB-11	4-8	2-butanone, ethylbenzene, acenaphthalene, anthracene, benzo(a)anthracene, Benzo(k)fluoranthene, benzo(g,h,i)perylene, chrysene, dibenzofuran, fluoranthene, fluorene, 2-methylnaphthalene, naphthalene, phenanthrene, pyrene	benzo(a)anthracene, benzo(a)pyrene, naphthalene

Based on observations made during the sampling phase, all contaminated soil identified in borings SB-6, SB-8, SB-9, SB-11, SB-12, and SB-13 is covered by asphalt and at least two feet of fill material. Therefore, there is no area of observed contamination associated with the site for purposes of the soil exposure pathway.

6.3 Ground and Surface Water Analysis Results

Contamination of ground and surface water was identified in some of the samples obtained from monitoring wells and Indian Creek.

6.3.1 Contamination of Ground Water

Since VOCs and SVOCs are not naturally occurring in ground water, any level detected above the detection limit is considered evidence of contamination. None of the ground water samples collected at the site exceeded the MDLs for any of the VOCs tested. The following table outlines the SVOCs identified in the ground water samples obtained at the site that exceed MDLs:

Table 6-4: SVOCs Present Above MDLs in Ground Water

CHEMICAL	CLASS	MW ID	MDL (mg/l)	LEVEL IDENTIFIED (mg/l)
Benzo(a)anthracene	SVOC	MW-3	0.00013	0.00068
Fluorene	SVOC	MW-3	0.002	0.004
Phenanthrene	SVOC	MW-3	0.005	0.012
Pyrene	SVOC	MW-3	0.002	0.004

Metals were identified in all ground water samples obtained at the site. Samples were obtained from three monitoring wells. Sampling location MW-1 is located on the property line and up-gradient of all former source areas on the site and existing soil contamination for metals. Levels observed in MW-2 and MW-3 were compared to levels in MW-1 to determine if a release has occurred. The following table outlines the levels of metals in ground water at MW-2 and MW-3 that are three times or more the concentrations found in MW-1:

Table 6-5: Metals Significantly Above Background Levels in Ground Water

CHEMICAL	CLASS	MW ID	MDL (mg/l)	LEVEL IDENTIFIED (mg/l)
Arsenic	Metal	MW-3	0.002	0.030
Lead	Metal	MW-2	0.002	0.016

6.3.2 Observed Release To Ground Water

The levels of SVOCs and metals presented in Tables 6-4 and 6-5 indicate an observed release of hazardous substances to ground water in the Quaternary System.

6.3.3 Contamination of Surface Water

None of the surface water samples collected at the site exceeded the MDL for any of the VOCs or SVOCs tested. Metals were identified in all surface water samples obtained at the site. Samples were obtained from three locations of Indian Creek. Sampling location SED-1 is

located up-gradient of all former source areas on the site and existing soil contamination for metals. Levels observed in SED-2 and SED-3 were compared to levels in SED-1 to determine if a release has occurred. The following table outlines the levels of metals in surface water at SED-2 and SED-3 that are three times or more the concentrations found in SED-1:

Table 6-6: Metals Significantly Above Background Levels in Surface Water

CHEMICAL	CLASS	MW ID	MDL (mg/l)	LEVEL IDENTIFIED (mg/l)
Arsenic	Metal	SW-3	0.002	0.048
Beryllium	Metal	SW-3	0.001	0.003
Cadmium	Metal	SW-3	0.001	0.002
Chromium, total	Metal	SW-3	0.001	0.059
Copper	Metal	SW-3	0.001	0.105
Lead	Metal	SW-3	0.002	0.122
Nickel	Metal	SW-3	0.001	0.099
Zinc	Metal	SW-3	0.005	0.758

6.3.4 Observed Release To Surface Water

The levels of metals presented in Table 6-6 indicate an observed release of hazardous substances to surface water in Indian Creek.

6.3.5 Ground and Surface Water Contamination Above ROs

A number of the ground water samples exhibited exceedences of State of Illinois ROs. The ROs used for comparison are found in 35 IAC 620, "Ground Water Quality". The ROs established in 620 are health and risk based standards applied to different classifications of ground water in the state. There are two primary use classifications for ground water in the State of Illinois and they are designated Class 1 and Class 2 ground water. Classes 3 and 4 are special use classifications which would not be applicable to the ground water at this site. Generally speaking, Class 1 ground water is high yield, good quality ground water that either is used, or could be used for potable municipal, industrial or private purposes. Class 1 ground water has more stringent protection and more stringent ROs than Class 2 ground water. Class 2 is ground water that does not meet the regulatory definition of Class 1, 3, or 4 ground water.

Of the constituents outlined in Tables 6.4, 6.5 and 6.6 above, two exceed at least one TACO RO. Those contaminants are listed in the following table:

Table 6-7: Ground and Surface Water RO Exceedences

CHEMICAL	CLASS	MW ID	CLASS 1 RO (mg/l)	CLASS 2 RO (mg/l)	LEVEL IDENTIFIED (mg/l)
Benzo(a)anthracene	SVOC	MW-3	0.00013	0.00065	0.00068
Lead	Metal	MW-2	0.0075	0.100	0.016
		MW-3	0.0075	0.100	0.010

The ground water at the site does not meet the regulatory definition of Class 1, 3 or 4 ground water. Therefore, the ground water would be Class 2. Given this, the only RO exceedence of the Class 2 RO is for Benzo(a)anthracene in MW-3. All other water samples (ground and surface) are below all applicable State of Illinois ROs.

It should be noted that surface water standards are established on a case-by-case basis in the State of Illinois. In all cases, the surface water standards are higher than the ground water standards. All surface water samples obtained at the site are below the ground water ROs and therefore, would likely be below any standard established for the surface water in Indian Creek associated with this site.

6.4 Summary of Investigation Results

The soil and ground water contamination appears to be limited to the site. There is limited impact to the sediment and surface water within Indian Creek. Some metals in the downgradient surface water sample (SW-3) are elevated, but do not exceed the Class 1 ground water standards, which would be more stringent than any surface water and/or surface water/ground water interface standards that would be established for the site. Comparison of the surface water samples to ground water standards is done only for initial review purposes, and should not be construed to be a regulatory criterion to be met.

7.0 POTENTIAL RECEPTOR AND EXPOSURE PATHWAY SUMMARY

The exposure to contaminants is the result of potential dermal contact, ingestion or inhalation of the contaminated media of concern via various exposure pathways. In order to identify the potential risk, these exposure pathways should be evaluated. At this site, the media of concern are the soil and ground water present, as well as the sediment and surface water of Indian Creek adjacent to the site. This section discusses the pathways of potential public exposure to any contamination that may be present in the media of concern at the site.

7.1 Soil Exposure Pathway

The physical conditions present at the site demonstrate that direct contact to contaminated soil is not occurring at the site. The site is covered by clean landscaped areas, asphalt, concrete and buildings. Additionally, three large areas of contaminated soil were excavated in the mid-1980s as part of the remediation of the site and construction of the USPS facilities. The area of soil contamination depicted on **Figure 6, Appendix A** is covered by asphalt, concrete, at least two feet of fill material and is partially encompassed by the surface water retention area.

The potentially effected population at the site includes the public using the postal facility and a total of 250 employees who work at the facility. Any contaminated soil which previously existed beneath the occupied MPO and VMF buildings was excavated prior to their construction.

By comparing the soil contamination levels to the State of Illinois TACO ROs, the potential risk to the potentially affected population can be evaluated. The following provides a summary of the RO exceedences of the soil samples collected at the site:

- Benzo(a)anthracene: The residential ingestion RO of 0.900 mg/kg and the commercial/industrial ingestion RO of 8.0 mg/kg were exceeded in SB-11 (level detected 13.90 mg/kg);
- Benzo(a)pyrene: The residential ingestion RO of 0.090 mg/kg was exceeded in SB-6 (level detected 0.209 mg/kg), SB-8 (level detected 0.119 mg/kg) and in SB-11 (level detected 8.53 mg/kg) and the commercial/industrial ingestion RO of 0.80 mg/kg was exceeded in SB-11 (level detected 8.53 mg/kg);
- Naphthalene: The construction worker inhalation RO of 1.80 mg/kg was exceeded in SB-11 (level detected 5.86 mg/kg);
- Arsenic: The residential and commercial/industrial ingestion RO of 13.0 mg/kg was exceeded in SB-6 (level detected 43.1 mg/kg), SB-8 (level detected 44.4 mg/kg), SB-9 (level detected 39.3 mg/kg) and SB-13 (level detected 31.8 mg/kg); and

- Lead: The residential, commercial/industrial and construction worker ingestion RO of 400.0 mg/kg was exceeded in SB-9 (level detected 411.0 mg/kg) and SB-12 (level detected 2,630.0 mg/kg)

7.2 Ground Water Migration Pathway

Geologic formations located within the four mile target distance limit (TDL) are discussed in section 5.1 of this report. No karst aquifers were identified within the four mile TDL. Based on the analysis presented in Section 6 of this report, an observed release of hazardous substances is present in the shallow Quaternary System. Levels of contamination are so low that no deep ground water aquifers are of concern for contamination. No samples were obtained in the Silurian, Ordovician, or Cambrian aquifers; however, documentation from the IEPA Bureau of Water indicates no contaminants from the site are present in municipal wells within the 4 mile TDL.

The site is not located within any type of public or private well setback zone or recharge area. Nor is the site located within a designated wellhead protection area. A well survey was conducted to identify wells within the four mile TDL for the site. The well survey report is provided on a CD in **Appendix H** of this report. Additionally, a map depicting the site, radius rings and wells is included as **Figure 8 in Appendix A** and a table summarizing the wells identified within one mile of the site is included as **Table 8 in Appendix B**. Individual wells beyond one mile were not plotted on figure 8; however, all well logs within the TDL were reviewed by section. A generalized table of all wells, including use, static water level, and aquifer use located within the TDL is included as **Table 9**.

The well survey was conducted by reviewing data from the public well database from Illinois Environmental Protection Agency, the Illinois State Geological Survey, the Illinois State Water Survey, the Illinois Department of Public Health and the Kane County Health Department. According to the well survey, there are 50 water wells that draw water from the shallow Quaternary System within the four mile TDL of the site. Most of the potable water wells in the area produce water from either the deep St. Peter Formation or the Mt. Simon Formation.

The well survey indicates that approximately 14 private and/or industrial use wells exist within one mile of the site. The closest well is located hydrologically upgradient of the site, approximately 1,000 feet to the northeast. The results of the well survey indicate that there is one community water supply well within one mile of the site. It is a City of Aurora municipal well and is located hydrologically upgradient of the site, approximately 3700 feet to the east. The site is not located within the setback zone for this well. This well was constructed in 1924, is listed to be 2260 feet deep, and draws water from the Cambrian Mt. Simon Formation. Of the 14 private and/or industrial wells identified within one mile of the site, only one domestic well draws water from the Quaternary system. This well, well ID# 22630 and identified as Leriviera Apartments, is located approximately 1,000 to 2,500 feet of the site in the cross-gradient

direction.

The survey also indicates there are 23 municipal wells, 9 business/commercial wells, 21 irrigation wells, 7 non-community public wells, 1 non-potable water well, 410 private wells, 3 subdivision water supply wells, and 26 wells of unknown use located within a one to four mile radius of the site. According to the well logs, the majority of these wells draw water from the Silurian-Ordovician system; however, several wells were identified which draw water from the Quaternary aquifer within the TDL. These include one well within one to two miles, 42 wells within two to three miles of the site, and four municipal wells.

The City of Aurora primarily obtains drinking water from the Fox River, but in times of high demand obtains drinking water from a network of 15 deep and five shallow wells, which draw from the Cambrian–Ordovician Aquifer system. Based on 2004 figures, the City of Aurora has a blended water system consisting of 7.5MGD (42.37%) from ground water and 10.2 MGD (57.6%) from the Fox River. According to the Illinois EPA, Bureau of Water (IEPABOW), the combined pumpage is 17 million gallons per year to an estimated 41,900 service connections (estimated population of 170,855) in Kane, Kendall, Will, and DuPage counties.

Other municipalities within the four mile TDL include the villages of North Aurora, Montgomery, and Boulder Hill. According to an email from Mr. Paul Young, Water Superintendent, the village of North Aurora utilizes five deep wells to provide 7,000 service connections (population 15,582). Approximately 60% of the water is used for domestic purposes, with 40% used for other uses. According to the Montgomery website (estimated population 14,662), the municipality draws water from eight deep wells, which are treated prior to distribution. No wells contribute more than 40% (based on average annual pumpage or capacity) of the total supply for any municipality within the four mile TDL.

Mr. ShibuVazha, Environmental Protection Engineer with the IEPA Division of Public Water Supplies, provided the following information regarding water supplies for Boulder Hill (population of 8,169 with 2,848 services): 20% of the water supply comes from Oswego and 80% comes from Montgomery. Both Oswego and Montgomery source water from deep ground water wells which are combined and treated prior to distribution.

The following table summarizes the estimated population of people served by wells that draw from the Quaternary aquifer within the TDL. For private wells, the population served is based on the average number of people per residence in Kane County (2.9). For municipal wells, all residents served by the system are included.

POPULATION SERVED BY QUARTERNARY WELLS WITHIN 4 MILES OF THE SITE

Distance of Well (s) from site source	Population Served
¼ mile or less	0
> ¼ mile to ½ mile	2.9
> ½ mile to 1 mile	0
> 1 mile to 2 miles	2.9
> 2 miles to 3 miles	121.8
> 3 miles to 4 miles	170,872

As the ground water contamination observed is limited to the former oil tank and former welding shop (SB-11 and MW-3, respectively), and only two wells are located within 1 mile of the site (one in the upgradient direction and one in the cross-gradient direction), no private or municipal wells are impacted or endangered by site attributable contamination.

According to email correspondence and consumer confidence reports, each municipality within the TDL combines water from each of its wells for treatment and distribution. Well log information obtained indicates there are 21 irrigation wells within the TDL. However, only one irrigation well draws water from the aquifer of concern. Ground water is not used for watering of commercial livestock, commercial food preparation, commercial irrigation, or supply for a major or designated water recreation area excluding drinking water use.

By comparing the ground water contamination levels to the State of Illinois 35 IAC 620 standards, the potential risk to the potentially affected population can be evaluated. The following provides a summary of the standard exceedences of the ground water samples collected at the site:

- Benzo(a)anthracene: The Class 1 standard of 0.00013 mg/l and the Class 2 standard of 0.00065 were exceeded in MW-3 (level detected 0.00068 mg/l); and
- Lead: The Class 2 standard of 0.0075 mg/l was exceeded in MW-2 (level detected 0.016 mg/l) and in MW-3 (level detected 0.010 mg/l).

7.3 Surface Water Migration Pathway

The site is located in the southern portion of the Fox River major watershed. Indian Creek, a first order tributary of the Fox River, is located adjacent to the northern boundary of the site. Indian Creek is not used as a water supply or for recreational purposes. A concrete channel embankment exists between the site and Indian Creek. There are two or more feet of fill material overlying contaminated soil on the site. There are no probable points of entry (PPE) to Indian Creek from the overland segment of the surface water migration pathway from the site. Based on the analysis presented in Section 6 of this report, an observed release of hazardous substances is present in Indian Creek.

Based on a review of USGS topographic maps, the Fox River, a tributary of the Illinois River is located approximately 530 feet west of the subject property and extends approximately 40 miles southwest where it joins the Illinois River. Portions of this river are used for potable water supplies and fishing and boating recreation. Approximately eight miles east of the subject property is the DuPage River, a tributary of the Des Plaines River that extends north to south. The nearest lake, Mastodon Lake, is located approximately 1 ½ mile south/southeast of the subject property. Nelson Lake (also known as Nelson Lake Marsh) and Peck Lake are located approximately six miles and seven miles from the subject property, respectively. Mill Creek and Waubonsie Creek, first order tributaries of the Fox River are located approximately four miles north and three miles southeast from the subject property, respectively. Blackberry Creek, a first order tributary of the Fox River is located approximately three miles west of the subject property beyond the Fox River. Rob Roy Creek and Big Rock Creek, first order tributaries of the Fox River are located eight miles southwest and seven miles south/southwest of the subject property.

A review of the Federal Emergency Management Agency (“FEMA”) Flood Insurance Rate Map (“FIRM”) indicates that a small portion of the site running along North Broadway Avenue lies within the 500-year flood plain of the Fox River/Indian Creek system. Please refer to **Figure 9, Appendix A** for a depiction of the flood plain designation for the site.

Based on data from 2004, the City of Aurora obtains 57.6% of its potable water from the Fox River. The river intakes are located approximately two miles north of the site upstream from the site. Other municipalities within the 15 mile TDL include the villages of Montgomery, Oswego, Lynwood, Bristol, and the United City of Yorkville. According to correspondence with each municipality and consumer confidence reports, each municipality uses ground water only to source their drinking water, with the exception of Lynwood, whose water comes from the City of Hammond, who pumps it out of Lake Michigan, sells it Munster Indiana, who sells it to the Village of Lynwood. Mr. ShibuVazha, Environmental Protection Engineer with the IEPA Division of Public Water Supplies, provided the following information regarding water supplies for Bristol: 10% of the supply comes from Oswego, 10% comes from Montgomery, and 80% comes from Yorkville. Oswego, Montgomery, and Yorkville utilize ground water only and do not use any surface water. Therefore Bristol also utilizes ground water only. The consumer confidence reports indicate each municipality sources its water from several wells which is treated prior to distribution. As these municipalities do not use surface water, surface water is not blended prior to distribution.

None of these municipalities utilize surface water intakes, standby surface water intakes, or surface water for emergency supplies. In addition, none of these communities utilize surface water for irrigation, commercial livestock watering, commercial food preparation, major or designated water recreation area excluding drinking water use, water designated by the state for drinking water use but not currently used, or water useable for drinking water but no drinking water intakes.

There are approximately 42 miles of wetland frontage along the Fox River within the 15 mile TDL. A table summarizing the wetland types found within the 15 mile TDL is included in **Appendix B**. The Fox River is used for fishing. Sensitive environments within the 15 mile TDL are summarized in the following table. A copy of the Ecological Compliance Assessment Tool (ECOCAT) report used to identify sensitive environments is included in **Appendix I**.

Protected Resource	Scientific Name	Designation
Black-Crowned Night Heron	<i>Nycticorax nycticorax</i>	Bird
River Redhorse	<i>Moxostoma carinatum</i>	Fish
Fox River INAI Site	NA	INAI
Yorkville Prairie INAI site	NA	INAI
Yorkville Prairie Nature Preserve	NA	Preserve
Yorkville Prairie South Natural Heritage Landmark	NA	Landmark
Yorkville Railroad Prairie Natural Heritage Landmark		Landmark
Yorkville Railroad Prairie Natural Heritage Landmark	NA	Landmark
Greater Redhorse	<i>Moxostoma carinatum</i>	Fish
Emmon's Woods Land and Water Reserve INAI site	NA	INAI
Maramech Woods INAI site	NA	INAI
Silver Springs Fen INAI site	NA	INAI
Yorkville Forested Seep and Fen INAI site	NA	INAI
Yorkville Seep INAI site	NA	INAI
Maramech Woods Nature Preserve	NA	Preserve
Silver Springs Railroad Prairie INAI site	NA	INAI
Silver Springs Railroad Prairie Natural Heritage Landmark	NA	Landmark
American Brooklime	<i>Veronica Americana</i>	Flower
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Bird
False Bugbane	<i>Cimicifuga racemosa</i>	Flower
Forked Aster	<i>Aster furcatus</i>	Flower
Heart-Leaved Plantain	<i>Plantago corddata</i>	Plant
Henslow's Sparrow	<i>Ammodramus henslowii</i>	Bird
Osprey	<i>Pandion haliaetus</i>	Bird
Sedge	<i>Carex bromoides</i>	Plant
Showy Lady's Slipper	<i>Cypripedium reginae</i>	Flower

The USGS provides gauging station data to determine the annual flow for the Fox River. Gauging station 05551000, Fox River at South Elgin, IL (approx 10 miles upriver of the site), had an average discharge of 1,096 cubic feet per second (CFS) in 1997. This figure correlates to 258,522.6239 million gallons per year (MGY) or 34,563.456 million cubic feet per year (MCFY). Gauging station 05551540, Fox River at Montgomery, IL (approx 2 miles downriver of the site) had an average discharge of 1,392 CFS in 2006. This figure correlates to 328,380.7 MGY or 43,898.112 MCFY.

All surface water samples obtained at the site are below the ground water ROs and therefore, would likely be below any standard established for the surface water in Indian Creek associated with this site.

7.4 *Air Migration Pathway*

There is no concern for the air migration pathway as the source area is completely covered by asphalt and two or more feet of fill material.

8.0 CONCLUSIONS

This data collected as part of this investigation indicate that the soil, ground water and surface water at the site have been impacted by VOCs, SVOCs and metals as a result of operations conducted by the previous property owner, Burlington Northern – Santa Fe Railroad. Analytical results are discussed in detail in **Section 6.0** of this report.

Soil chemistry indicates contamination is present, however this soil is beneath an impermeable surface (asphalt and concrete) and under two feet of clean soil. Therefore, there is no observed area of contamination for the soil exposure pathway.

An observed release of hazardous substances was documented for the ground water migration pathway. The observed release to ground water is limited to the Quaternary aquifer. The potentially affected population which draws on water within this aquifer includes 2.9 people within the 0 to 1 mile range, 2.9 people in the 1 to 2 mile range, 121.8 people in the 2 to 3 mile range, and 170,872 in the three to four mile range.

The areas soil and ground water impact appear to be limited to the site and shallow aquifer and are covered by asphalt and concrete. Therefore, the area of exceedence of State of Illinois ROs does not appear to present a health risk to the potentially affected population (visitors and employees of the postal facility and nearby residences and businesses).

An observed release of hazardous substances was documented for the surface water migration pathways. The sediment and surface water of Indian Creek (located adjacent to the site) show elevated levels for metals in the downstream sampling locations (as compared to an upstream sampling location and statewide background standards for soil. The levels of metals in these samples, however, are not above levels at which standards would likely be applied to the site under Illinois risk-based cleanup standards.





APPENDIX A – MAPS AND FIGURES

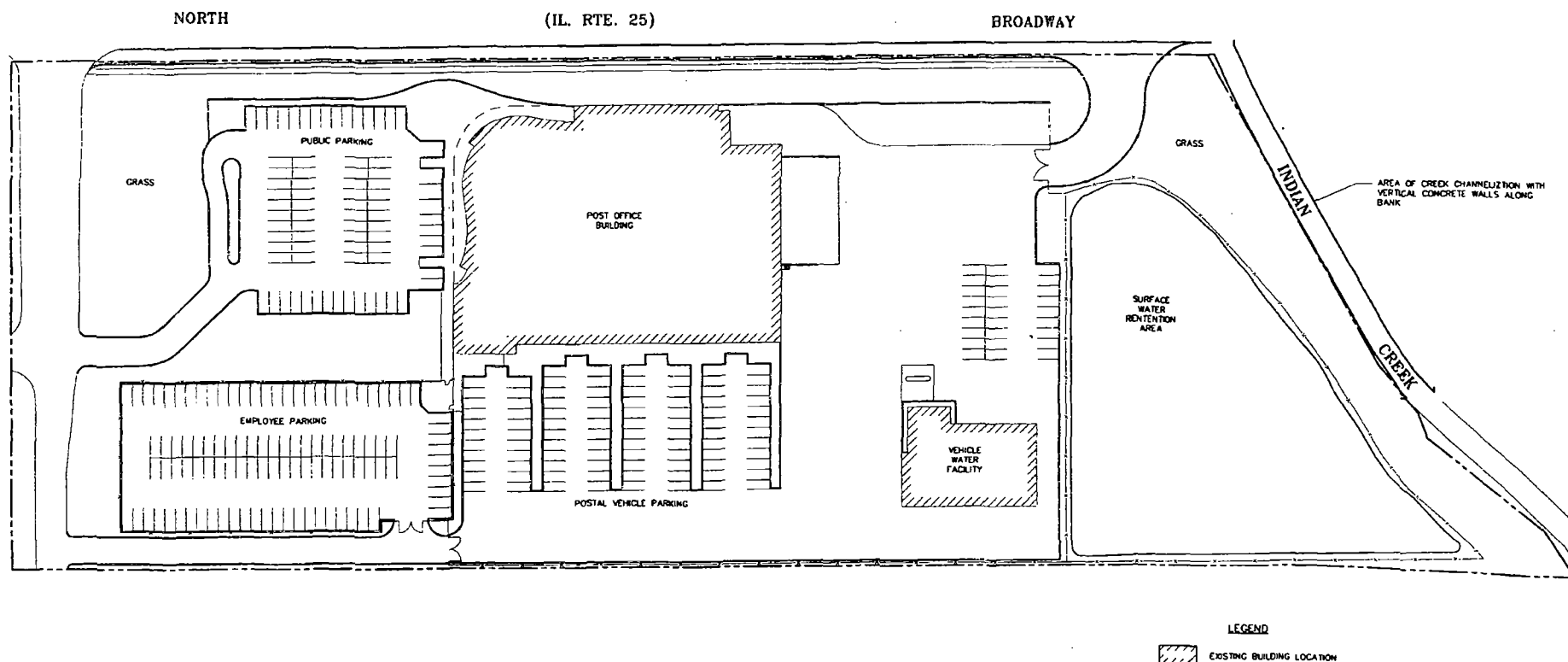


FIGURE 2

SITE BASE MAP

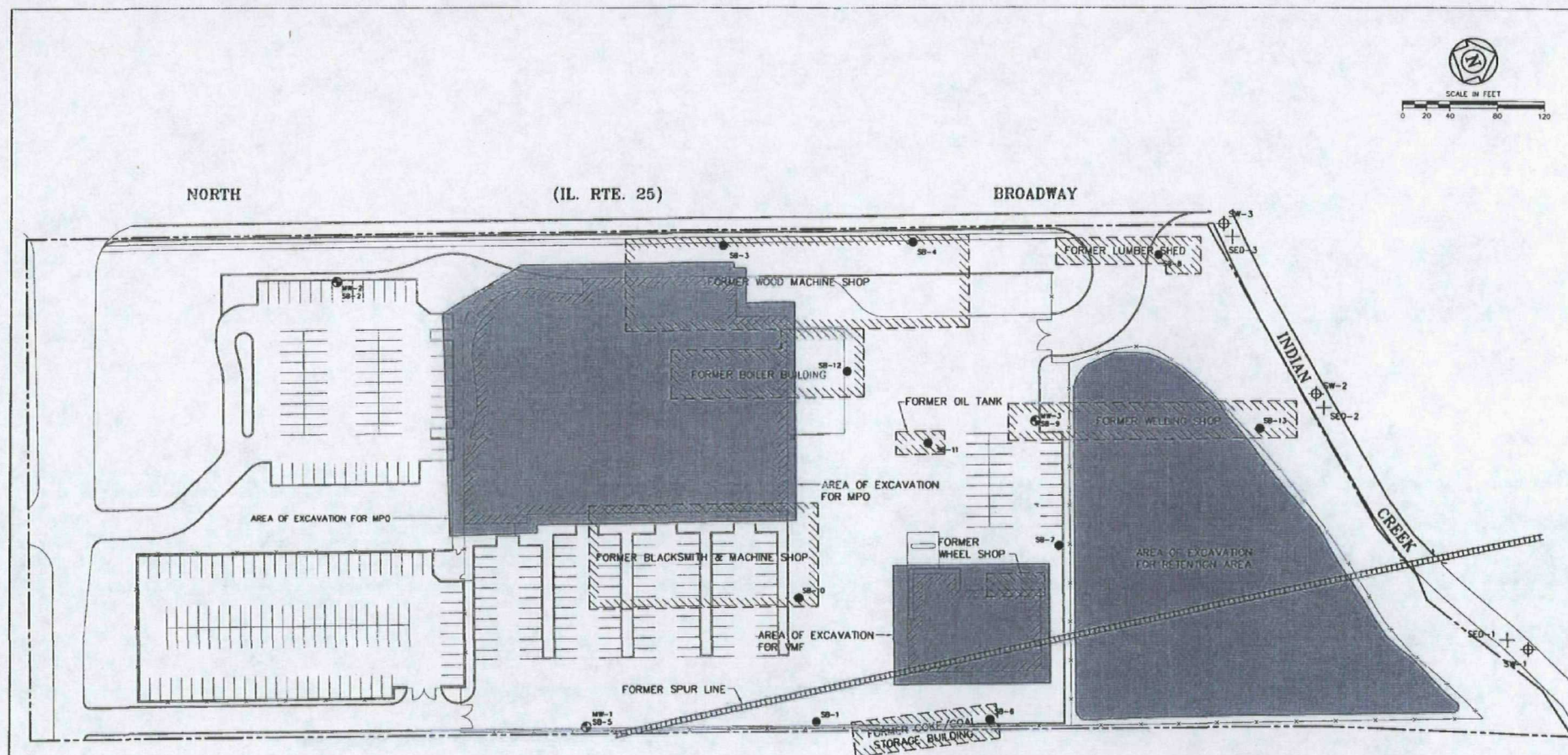
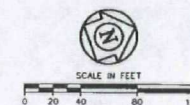
AURORA - NPG / VMP, 625 N. BROADWAY AVENUE

DEUCHLER ENVIRONMENTAL, INC.
Consulting Engineers - Aurora, Illinois

REVISION: REVISED FROM SWMP DATED 3/29/06

DATE 7/21/06 DRAWN BY APPROVED BY M. BOON SCALE 1" = 100' F:\DEVELOPMENT\SWMP-1102 JOB NO. 102/0008/00

DEU-1102-03



- LEGEND**
- AREA OF PREVIOUS SOIL EXCAVATION
 - EXISTING BUILDING LOCATION
 - FORMER BUILDING LOCATION
 - SB-8 SOIL BORING LOCATION
 - MW-1 MONITORING WELL LOCATION
 - SW-1 SURFACE WATER SAMPLING LOCATION
 - SED-1 SEDIMENT WATER SAMPLING LOCATION

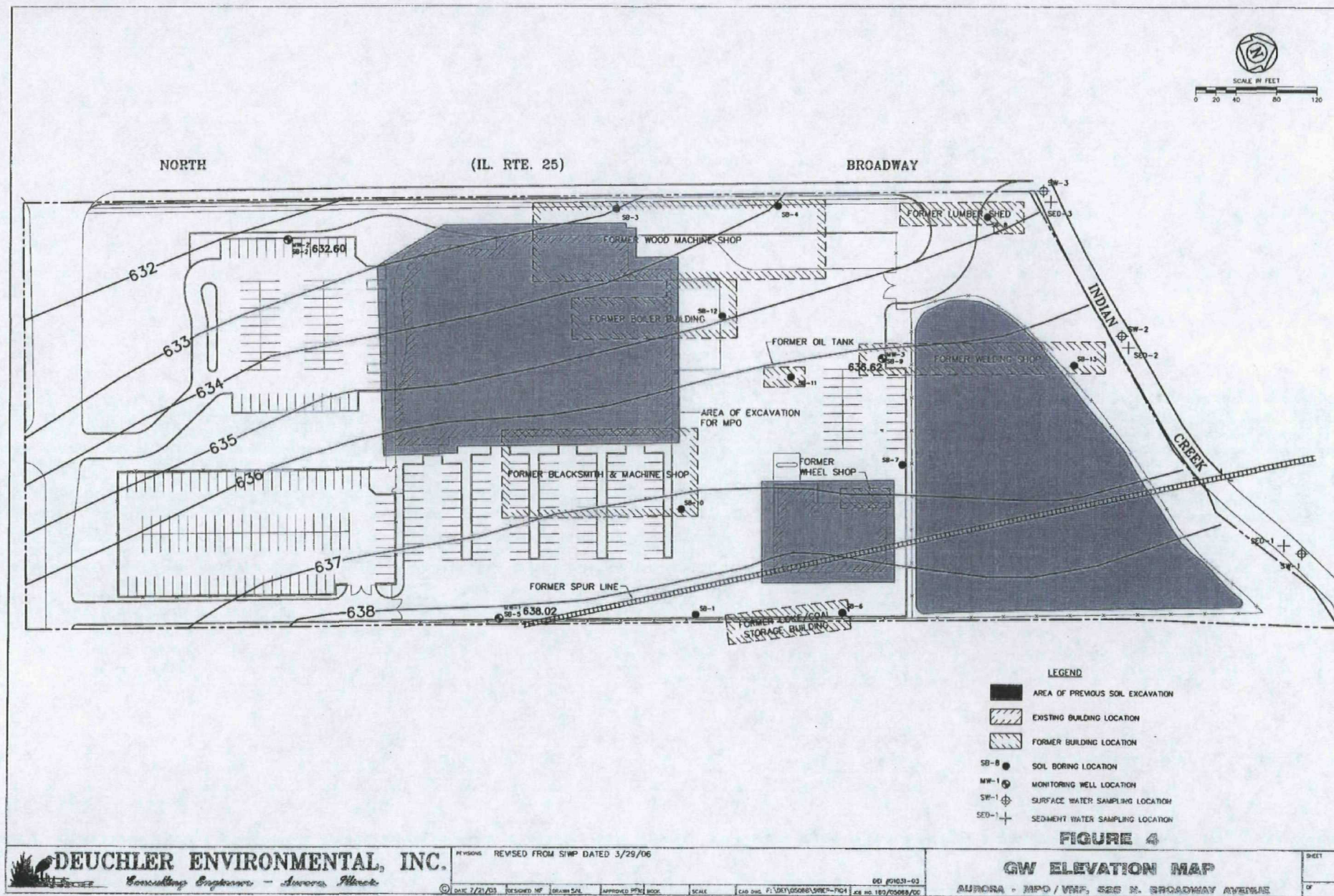
FIGURE 3

SITE MAP WITH BORING / MW LOCATIONS
 AURORA - MPO / VMF, 525 N. BROADWAY AVENUE

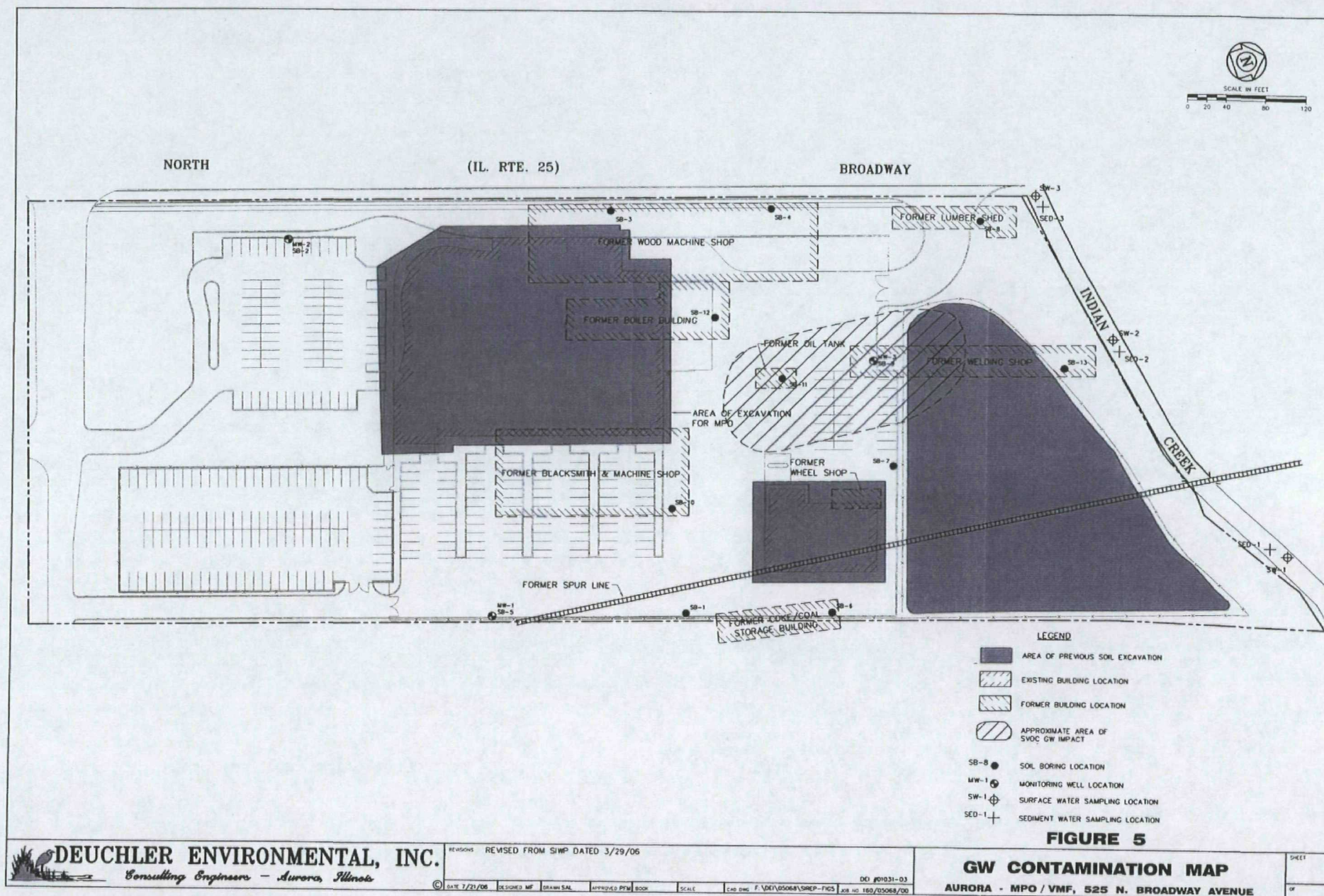
DEUCHLER ENVIRONMENTAL, INC.
 Consulting Engineers - Aurora, Illinois

REVISED FROM SHMP DATED 3/29/06
 DATE 7/21/06 DESIGNED MF DRAWN SML APPROVED PTM BOOK SCALE 240 SHEET 1 OF 1
 PROJECT NO. 050608 SHMP-FIG.3 JOB NO. 160/050608/00

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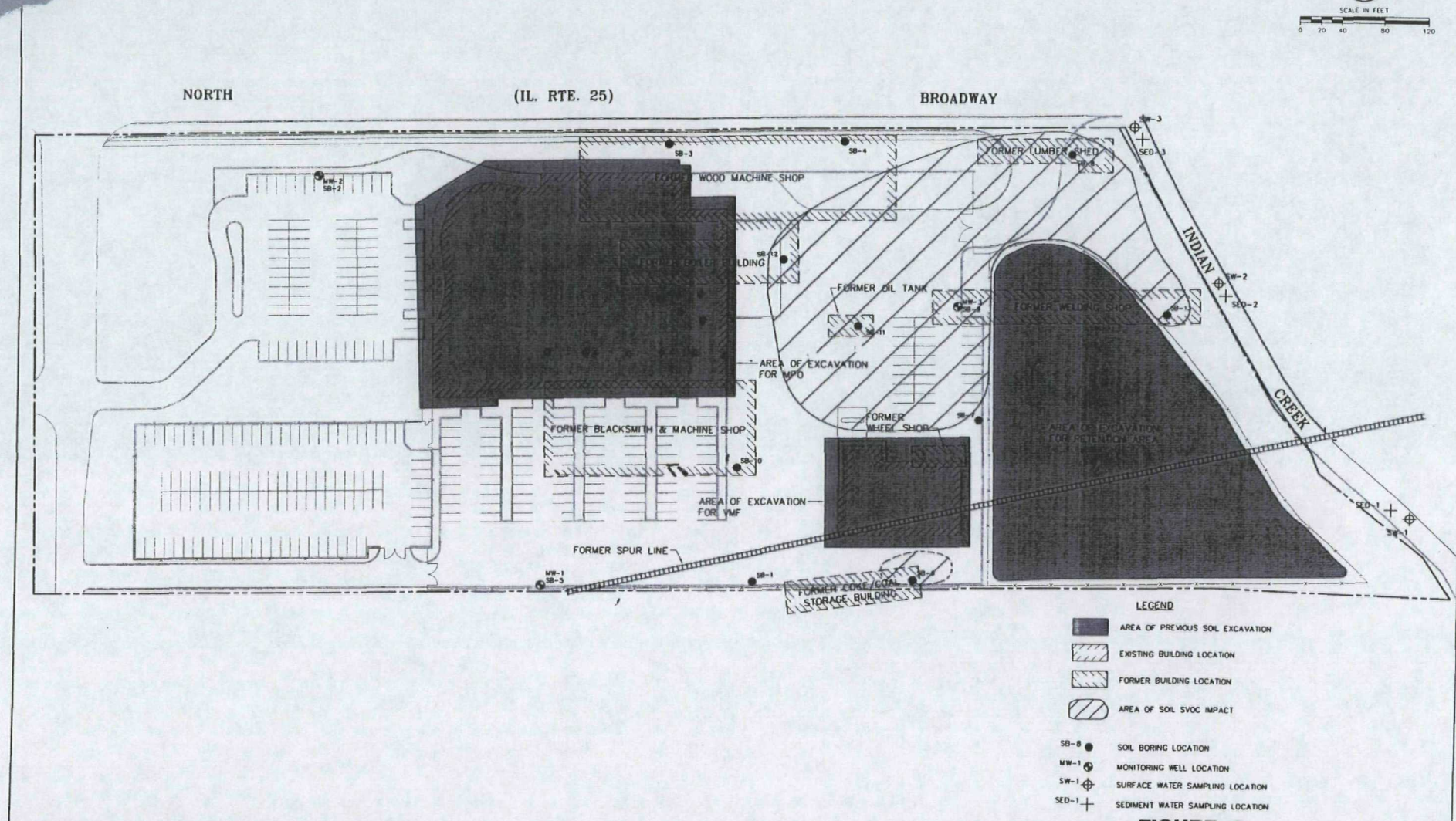


FIGURE 6

SOIL CONTAMINATION MAP

AURORA - MPO / USE ESR & BROADWAY SUPERFUND

DEUCHLER ENVIRONMENTAL, INC.
Consulting Engineers - Aurora, Illinois

REVISIONS: REVISED FROM SWMP DATED 3/29/06
DATE: 7/21/06 DESIGNED BY: FORAM: SAL APPROVED PPD: [signature] SCALE: 1" = 100' FILE NO: E:\MPO\AURORA\SWMP-FIG6.dwg

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FIGURE 7: AERIAL PHOTOGRAPH OF SITE

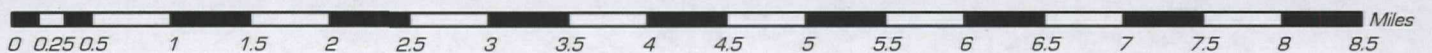
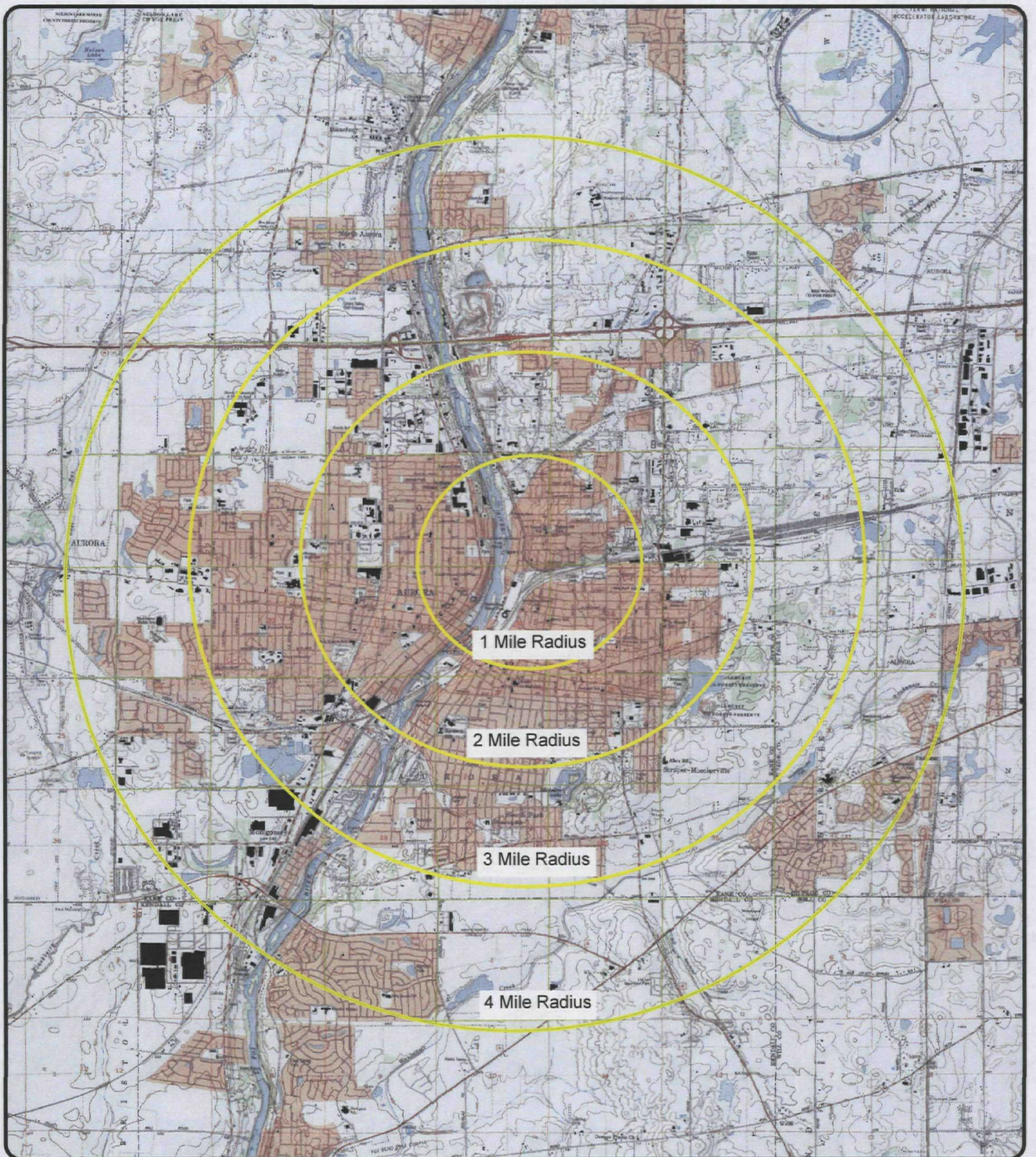
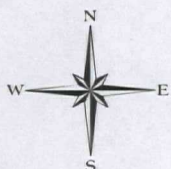




Figure 8

Well Location Map Aurora, Illinois



Map Legend

-  Section lines
-  Radius line

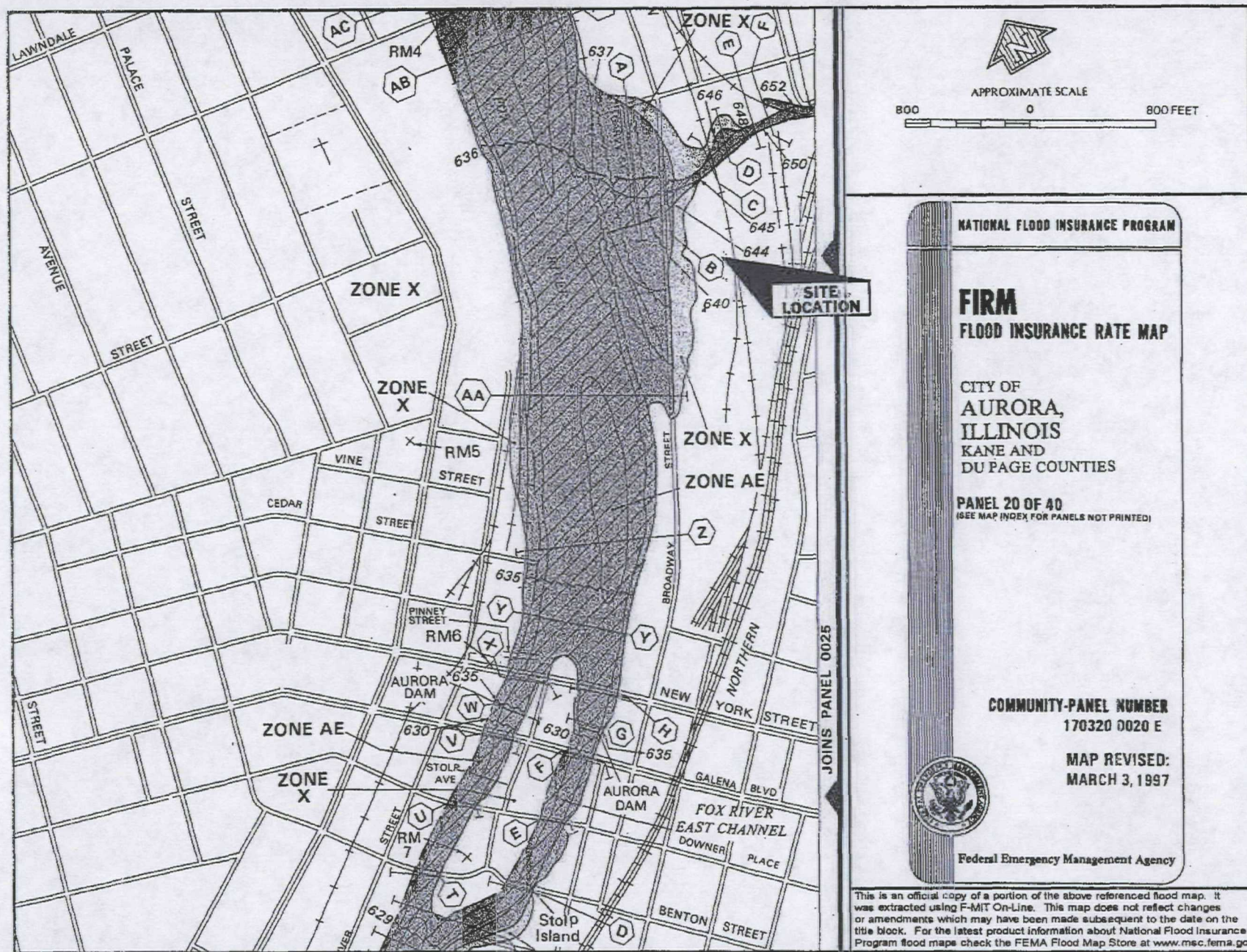


FIGURE 9: FLOOD PLAIN MAP



APPENDIX B – TABLES

SITE NAME: USPS - Aurora MPO
ADDRESS: 525 N. Broadway, Aurora, Illinois
DEI PROJECT NUMBER: DEI #01031-03
REGULATORY ID NUMBER: LPC#0890050033, ILD981795453
REMEDIATION OBJECTIVE INPUT DATE: July 24, 2006 by Marc Fisher

SOIL SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS RESULTS

NOTES

1. Soil sample from SB-1 not obtained due to lack of sufficient soil recovery above bedrock.
2. Groundwater at the site reflects the definition of Class 2 as per 35 IAC 620.

Bold indicates Residential Remediation Objective exceeded
 # indicates Commercial/Industrial Remediation Objective exceeded
 Underline indicates Construction Worker Remediation Objective exceeded
 * Migration to Ground Water Remediation Objective exceeded
 # chemical and inorganic constituents of the liquid phase effluent
 NA = chemical not analyzed

Concentrations in milligrams per kilogram (mg/kg)
Analyzed using USEPA Method 1540C-8270C

TABLE 2 (continued)
SOIL SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS RESULTS

USPS - Aurora MPO
 525 N Broadway, Aurora, Illinois
 LPC#0890050033, IL D961795453
 DEI#01031-03

BORING ID ¹	DATE SAMPLED	SAMPLE DEPTH	Concentrations (mg/kg)																						
			Chrysene	Dibenz(a,h) anthracene	Dibenzofuran	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	3,3-Dichlorobenzidine	2,4-Dichlorophenol	Diethyl phthalate	2,4-Dimethylphenol	Dimethyl phthalate	Di-n-butylphthalate	Di-n-octyl phthalate	4,6-Dinitro-2-methylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane
SB-1	7/14/2006	2-4	<0.330	<0.090	<0.330	<0.330	<0.330	<0.330	<0.660	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<0.250	<0.260	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-2	7/14/2006	12-15	<0.330	<0.090	<0.330	<0.330	<0.330	<0.330	<0.660	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<0.250	<0.260	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-4	7/17/2006	4-7.5	<0.330	<0.090	<0.330	<0.330	<0.330	<0.330	<0.660	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<0.250	<0.260	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-5	7/14/2006	6-8	<0.330	<0.090	<0.330	<0.330	<0.330	<0.330	<0.660	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<0.250	<0.260	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-6	7/14/2006	2-4	0.678	<0.090	<0.330	<0.330	<0.330	<0.330	<0.660	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<0.250	<0.260	0.528	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-7	7/14/2006	8-10	<0.330	<0.090	<0.330	<0.330	<0.330	<0.330	<0.660	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<0.250	<0.260	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-8	7/14/2006	4-8	<0.330	<0.090	<0.330	<0.330	<0.330	<0.330	<0.660	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<0.250	<0.260	0.418	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-9	7/14/2006	8-10	0.427	<0.090	<0.330	<0.330	<0.330	<0.330	<0.660	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<0.250	<0.260	<0.330	0.722	<0.330	<0.330	<0.330	<0.330	
SB-10	7/14/2006	4-8	<0.330	<0.090	<0.330	<0.330	<0.330	<0.330	<0.660	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<0.250	<0.260	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-11	7/14/2006	4-8	30.800	<0.540	3.830	<1.980	<1.980	<1.980	<3.960	<1.980	<1.980	<1.980	<1.980	<1.980	<9.600	<9.600	<1.500	<1.560	5.890	11.000	<1.980	<1.980	<1.980	<1.980	
SB-12	7/14/2006	4-8	0.587	<0.090	<0.330	<0.330	<0.330	<0.330	<0.660	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<0.250	<0.260	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-13	7/17/2006	0-4	0.525	<0.090	<0.330	<0.330	<0.330	<0.330	<0.660	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<0.250	<0.260	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SED-1	7/17/2006	Upgradient	<0.330	<0.090	<0.330	<0.330	<0.330	<0.330	<0.660	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<0.250	<0.260	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SED-2	7/17/2006	Midgradient	<0.330	<0.090	<0.330	<0.330	<0.330	<0.330	<0.660	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<0.250	<0.260	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SED-3	7/17/2006	Downgradient	<0.330	<0.090	<0.330	<0.330	<0.330	<0.330	<0.660	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<0.250	<0.260	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
TACO TIER 1 REMEDIAL OBJECTIVES	RESIDENTIAL	INGESTION	88	0.09	—	7,000	—	—	1	230	63,000	1,600	—	—	1,600	—	160	0.9	0.9	3,100	3,100	0.4	16	550	78
		INHALATION	—	—	—	560	—	11,000	—	—	2,000	—	—	—	10,000	—	—	—	—	—	1	1,000	10	—	—
	COMMERCIAL INDUSTRIAL	INGESTION	780	0.8	—	180,000	—	—	13	6,100	1,000,000	41,000	—	—	41,000	—	4,100	6.4	6.4	82,000	82,000	4	410	14,000	2,000
		INHALATION	—	—	—	560	—	17,000	—	—	2,000	—	—	—	10,000	—	—	—	—	—	16	1,000	16	—	—
	CONSTRUCTION WORKER	INGESTION	17,000	17	—	18,000	—	—	280	610	1,000,000	41,000	—	—	4,100	—	410	160	160	82,000	82,000	78	41	14,000	2,000
		INHALATION	—	—	—	310	—	340	—	1	2,000	—	—	—	10,000	—	—	—	—	—	2.6	180	11	—	—
SOIL COMP. OF GW INGESTION ²	CLASS 1	160	2	—	17	—	2	0.007	1	470	8	—	—	10,000	—	0.2	0.0008	0.0007	4,300	560	2	2.9	400	0.5	
	CLASS 2	880	7.6	—	43	—	11	0.033	1	470	8	—	—	10,000	—	0.2	0.0008	0.0007	21,000	2,600	11	15	2,200	2.6	

NOTES
 1. Soil sample from SB-3 not obtained due to lack of sufficient soil recovery above bedrock.
 2. Groundwater at the site meets the definition of Class 1 as per 35 IAC 329.

Bold indicates Remedial Objectives exceeded.
 Italic indicates Commercial/Industrial Remedial Objectives exceeded.
 Underlined indicates Construction Worker Remedial Objectives exceeded.
 All = Not applicable Groundwater Remedial Objectives exceeded.
 Shaded cells indicate compliance with the MCL, MCLL, or GWDO.
 NR = chemical not analyzed.

Concentrations in milligrams per kilogram (mg/kg).
 Analyzed using USEPA Method 8140C/82/83.

TABLE 2 (continued)

OIL SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS RESULTS

USPS - Aurora MPO
525 N Broadway, Aurora, Illinois
LPC#0890050033, ILD981795453
DEI #01031-03

BORING ID ¹	DATE SAMPLED	SAMPLE DEPTH	Indeno(1,2,3-cd) pyrene	Isochlorane	2-Methylnaphthalene	2-Methylphenol	3,4-Methylphenol	Naphthalene	2-Nitroaniline	3-Nitroaniline	4-Nitroaniline	Nitrobenzene	2-Nitrophenol	4-Nitrophenol	n-Nitrosodimethylamine	n-Nitrosodi-n-propylamine	n-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine	1,2,4-Trichlorobenzene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol
SB-1	7/14/2006	2-4	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<1.600	<0.260	<1.600	<1.600	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-2	7/14/2006	12-15	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<1.600	<0.260	<1.600	<1.600	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-4	7/17/2006	4-7.5	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<1.600	<0.260	<1.600	<1.600	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-5	7/14/2006	6-8	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<1.600	<0.260	<1.600	<1.600	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-6	7/14/2006	2-4	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<1.600	<0.260	<1.600	<1.600	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-7	7/14/2006	8-10	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<1.600	<0.260	<1.600	<1.600	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-8	7/14/2006	4-8	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<1.600	<0.260	<1.600	<1.600	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-9	7/14/2006	8-10	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<1.600	<0.260	<1.600	<1.600	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-10	7/14/2006	4-8	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<1.600	<0.260	<1.600	<1.600	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-11	7/14/2006	4-8	<1.980	<1.980	<62.300	<1.980	<1.980	<5.860	<9.600	<9.600	<9.600	<1.580	<9.600	<9.600	<1.980	<1.980	<1.980	<1.980	<1.980	<1.980	<1.980	<1.980	<1.980	<1.980	
SB-12	7/14/2006	4-8	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<1.600	<0.260	<1.600	<1.600	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SB-13	7/17/2006	0-4	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<1.600	<0.260	<1.600	<1.600	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SED-1	7/17/2006	Upgradient	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<1.600	<0.260	<1.600	<1.600	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SED-2	7/17/2006	Midgradient	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<1.600	<0.260	<1.600	<1.600	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
SED-3	7/17/2006	Downgradient	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<1.600	<1.600	<1.600	<0.260	<1.600	<1.600	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	
TACO TIER 1 REMEDIATION OBJECTIVES	RESIDENTIAL	INGESTION	0.5	15,600	—	3,800	390	1,600	—	—	—	39	—	—	—	0.09	130	3	—	47,000	2,300	75	750	7,800	58
		INHALATION	—	4,600	—	—	15,000	170	—	—	—	92	—	—	—	—	—	—	—	—	120,000	3,200	—	—	200
	COMMERCIAL INDUSTRIAL	INGESTION	8	410,000	—	100,000	10,000	41,000	—	—	—	1,000	—	—	—	0.6	1,200	24	—	1,000,000	61,000	2,000	20,000	200,000	620
		INHALATION	—	4,600	—	—	15,000	270	—	—	—	140	—	—	—	—	—	—	—	—	—	120,000	3,200	—	390
	CONSTRUCTION WORKER	INGESTION	170	410,000	—	100,000	1,000	4,100	—	—	—	1,000	—	—	—	18	25,000	520	—	120,000	61,000	2,000	20,000	200,000	11,000
		INHALATION	—	4,600	—	—	15,000	1.8	—	—	—	9.4	—	—	—	—	—	—	—	—	5,200	920	—	—	640
SOIL COMP OF GW INGESTION ²		CLASS 1	14	8	—	15	0.24	12	—	—	—	0.1	—	—	—	0.00005	1	0.03	—	100	4,200	0.029	5	270	0.2
		CLASS 2	69	8	—	15	0.24	18	—	—	—	0.1	—	—	—	0.00005	5.6	0.14	—	100	21,000	0.029	83	1,400	0.77

NOTES

1 Soil sample from SB-3 not obtained due to lack of sufficient soil recovery above bedrock

2 Ground water at the site meets the definition of Class 2 as per 25 USC 620

Bold indicates Remedial Remediation Objective exceeded

Italics indicates Commercial Industrial Remediation Objective exceeded

Underlined indicates Construction Worker Remediation Objective exceeded

NA = Not Analyzed

NA = chemical not analyzed

Concentrations in milligrams per kilogram (mg/kg)

Analysed using USEPA Method 8240C/8270C

SOIL TOTAL METALS ANALYSIS RESULTS

USPS - Aurora MPO
525 N Broadway, Aurora, Illinois
LPC#0890050033, ILD981795453
DEI #01031-03

BORING ID ¹	DATE SAMPLED	SAMPLE DEPTH	pH	Antimony	Arsenic ^a	Beryllium	Cadmium	Chromium ^b	Copper	Cyanide	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc	
SB-1	7/14/2006	2-4	8.40	<1.00	11.30	0.90	0.40	25.40	18.63	<0.10	5.00	<0.05	20.40	<0.20	<0.10	<1.00	93.80	
SB-2	7/14/2006	12-15	8.75	<1.00	9.90	0.80	0.40	21.50	18.40	0.41	18.90	<0.05	32.50	<0.20	<0.10	<1.00	59.10	
SB-4	7/17/2006	4-7.5	8.56	<1.00	5.90	0.80	0.80	21.70	18.50	<0.10	12.60	<0.05	24.80	<0.20	<0.10	<1.00	68.90	
SB-5	7/14/2006	6-8	8.31	<1.00	6.00	0.60	0.20	12.80	13.00	<0.10	14.20	<0.05	15.40	<0.20	<0.10	<1.00	38.60	
SB-6	7/14/2006	2-4	7.63	5.00	43.10	0.80	1.00	15.20	92.20	0.20	28.10	0.21	53.00	5.30	<0.10	<1.00	65.10	
SB-7	7/14/2006	8-10	7.93	<1.00	5.20	1.10	0.80	20.60	34.90	<0.10	27.90	0.08	23.70	<0.20	<0.10	<1.00	96.50	
SB-8	7/14/2006	4-8	7.44	1.30	44.40	1.40	1.40	31.30	228.00	<0.10	259.00	0.18	36.50	1.70	<0.10	<1.00	323.00	
SB-9	7/14/2006	8-10	7.78	5.10	39.30	1.20	2.40	18.10	190.00	<0.10	411.00	<0.05	23.60	1.80	<0.10	<1.00	334.00	
SB-10	7/14/2006	4-8	8.80	<1.00	9.30	0.90	0.20	24.50	18.60	<0.10	14.70	<0.05	22.50	<0.20	<0.10	<1.00	60.50	
SB-11	7/14/2006	4-8	9.85	<1.00	8.50	0.90	0.40	23.90	16.80	0.21	14.20	0.06	90.80	<0.20	<0.10	<1.00	66.50	
SB-12	7/14/2006	4-8	8.85	5.20	11.20	0.10	1.60	106.00	256.00	<0.10	2,630.00	<0.05	13.90	1.20	0.70	<1.00	626.00	
SB-13	7/17/2006	0-4	7.40	4.60	31.80	1.60	3.00	19.20	114.00	0.17	325.00	0.17	33.70	3.00	0.70	<1.00	319.00	
SED-1	7/17/2006	Upgradient	8.88	<1.00	1.80	0.10	0.20	3.00	6.50	<0.10	11.10	<0.05	3.40	<0.20	<0.10	<1.00	31.60	
SED-2	7/17/2006	Midgradient	8.77	2.40	2.60	0.20	0.70	13.00	228.00	<0.10	55.40	0.07	21.10	<0.20	0.20	<1.00	125.00	
SED-3	7/17/2006	Downgradient	8.92	<1.00	5.50	0.40	0.50	6.80	17.10	<0.10	26.50	<0.05	10.60	<0.20	<0.10	<1.00	173.00	
TACO TIER 1 REMEDIAL OBJECTIVES	RESIDENTIAL	INGESTION	—	31.0	BACK	160.0	78.0	230.0	2,900	1,600	400	23.0	1,600	390	390	6.3	23,000	
		INHALATION	—	—	750	1,300	1,800	270.0	—	—	—	10.0	13,000	—	—	—	—	
	COMMERCIAL INDUSTRIAL	INGESTION	—	820.0	BACK	4,100	2,000	6,100	82,000	41,000	400	610	41,000	10,000	10,000	160	610,000	
		INHALATION	—	—	1,200	2,100	2,800	420.0	—	—	—	540,000	21,000	—	—	—	—	
	CONSTRUCTION WORKER	INGESTION	—	82.0	61.0	410	200	4,100	8,200	4,100	400	61.0	4,100	1,000	1,000	160	61,000	
		INHALATION	—	—	25,000	44,000	59,000	690.0	—	—	—	52,000	440,000	—	—	—	—	
	MIGRATION TO GROUNDWATER ²	CLASS 1	—	0.006	0.05	0.004	0.005	0.1	0.65	0.2	0.0075	0.002	0.1	0.05	0.05	0.002	5.0	
		CLASS 2	—	0.024	0.2	0.5	0.05	1.0	0.65	0.6	0.1	0.01	2.0	0.05	—	0.02	10.0	
	HAZARDOUS (mg/l) ⁷	TCLP SAMPLES	—	—	5.0	—	1.0	5.0	—	—	—	5.0	0.2	—	1.0	5.0	—	—
	TACO BACKGROUND ^{3, 4}	METRO	—	4.0	13.0	0.59	0.60	16.2	19.6	0.51	36.0	0.06	18.0	0.48	0.55	0.32	95.0	
NON-METRO		—	3.3	11.3	0.56	0.50	13.0	12.0	0.50	20.9	0.05	13.0	0.37	0.50	0.42	60.2		

NOTES

- 1- Soil sample from SB 3 not obtained due to lack of sufficient soil recovery above bedrock.
- 2- Ground water at the site meets the definition of Class 2 as per 35 IAC 620
- 3- Background Levels applicable to the site are for Counties Within Metropolitan Statistical Areas as per 35 IAC 742 APPENDIX A Table G
- 4- Background values as listed in 742 APPENDIX A Table G. Background levels not applicable to Indian Creek sediment samples
- 5- Arsenic regional and corrective groundwater remediation objectives are equal to the background levels listed in 742 APPENDIX A Table G
- 6- Lowest IRO used among Cr-Total, Cr-3 or Cr-6
- 7- Hazardous Toxicity value as listed in 35 IAC 721.124

Bold indicates Residential Remediation Objective exceeded

Italics indicates Commercial Industrial Remediation Objective exceeded

Usage: 1 indicates Construction Worker Remediation Objective exceeded

Shades of Blue: A History of the Color Blue in Art, Literature, and Culture. By David Mervin. New York: Basic Books, 1994. Pp. 288. \$24.95. ISBN 0-465-02500-0.

M = Migration to Ground Water Remediation Objective exceeded

1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 26

Concentrations in milligrams per kilogram (mg/kg). NA indicates that the

Analyzed using USEPA Method 3050B/6010B

*USEPA Method 4500H+B used for pH USEPA Method 7470A used for

TABLE 4

GROUND WATER VOLATILE ORGANIC COMPOUND ANALYSIS RESULTS

USPS - Aurora MPO
 525 N Broadway, Aurora, Illinois
 LPC#0890050033, ILD981795453
 DEI #01031-03

BORING ID	DATE SAMPLED	Acetone	Benzene	Bromodichloromethane	Bromoform	Bromomethane	2-Butanone (MEK)	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-dichloroethene
MW-1/SB-5	7/18/2006	<0.100	<0.005	<0.001	<0.001	<0.005	<0.010	<0.005	<0.005	<0.005	<0.001	<0.010	<0.001	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005
MW-2/SB-2	7/18/2006	<0.100	<0.005	<0.001	<0.001	<0.005	<0.010	<0.005	<0.005	<0.005	<0.001	<0.010	<0.001	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005
MW-3/SB-9	7/18/2006	<0.100	<0.005	<0.001	<0.001	<0.005	<0.010	<0.005	<0.005	<0.005	<0.001	<0.010	<0.001	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005
SW-1 ²	7/17/2006	<0.100	<0.005	<0.001	<0.001	<0.005	<0.010	<0.005	<0.005	<0.005	<0.001	<0.010	<0.001	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005
SW-2	7/17/2006	<0.100	<0.005	<0.001	<0.001	<0.005	<0.010	<0.005	<0.005	<0.005	<0.001	<0.010	<0.001	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005
SW-3	7/17/2006	<0.100	<0.005	<0.001	<0.001	<0.005	<0.010	<0.005	<0.005	<0.005	<0.001	<0.010	<0.001	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005
TACO TIER 1 REMEDIAL OBJECTIVES	CLASS I	0.7000	0.0050	0.00020	0.0010	—	4.2000	0.7000	0.0050	0.1000	0.1400	—	0.0002	—	0.7000	0.0050	0.0070	0.0700	0.1000
	CLASS II	0.7000	0.0250	0.00020	0.0010	—	4.2000	3.5000	0.0250	0.5000	0.1400	—	0.0010	—	3.5000	0.0250	0.0350	0.2000	0.6000

NOTES

1 - Ground water at the site meets the definition of Class 2 as per 35 IAC 620

2 - Ground water standards not applicable to surface water samples obtained. Surface water standards applied on a site-by-site basis

Italics indicates Class II Ground Water Tier 1 Remediation Objective exceeded

Bold indicates Class I Ground Water Tier 1 Remediation Objective exceeded

Solid cells indicate exceedance of the MCLG for the respective chemical

NA = chemical not analyzed

Concentrations in milligrams per liter (mg/L)

Analyzed using USEPA Method 5030B/8260B

TABLE 4 (continued)

GROUND WATER VOLATILE ORGANIC COMPOUND ANALYSIS RESULTS

USPS - Aurora MPO
525 N Broadway, Aurora, Illinois
LPC#0890050033, ILD981795453
DEI #01031-03

BORING ID	DATE SAMPLED	1,2-dichloropropane	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethyl benzene	2-Hexanone	4-methyl-2-pentanone	MTBE	Methylene chloride	Styrene	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	1,1,2-trichloroethane	Trichloroethene	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MW-1/SB-5	7/18/2006	<0.005	<0.001	<0.001	<0.005	<0.010	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.002	<0.005
MW-2/SB-2	7/18/2006	<0.005	<0.001	<0.001	<0.005	<0.010	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.002	<0.005
MW-3/SB-9	7/18/06	<0.005	<0.001	<0.001	<0.005	<0.010	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.002	<0.005
SW-1	7/17/2006	<0.005	<0.001	<0.001	<0.005	<0.010	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.002	<0.005
SW-2	7/17/2006	<0.005	<0.001	<0.001	<0.005	<0.010	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.002	<0.005
SW-3	7/17/2006	<0.005	<0.001	<0.001	<0.005	<0.010	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.002	<0.005
TACO TIER 1 REMEDIATION OBJECTIVES	CLASS I	0.005	0.001	0.001	0.700	—	—	0.070	0.005	0.10	0.21000	0.005	1.00	0.20	0.005	0.005	7.0	0.002	10.0
	CLASS II	0.025	0.005	0.005	1.000	—	—	0.070	0.050	0.50	1.05000	0.025	2.50	1.00	0.050	0.025	7.0	0.010	10.0

NOTES
1 - Ground water at the site meets the definition of Class 2 as per 35 IAC 620
2 - Ground water standards not applicable to surface water samples obtained. Surface water standards applied on a site-by-site basis.

Italics Indicates Class II Ground Water Tier 1 Remediation Objective exceeded
Bold indicates Class I Ground Water Tier 1 Remediation Objective exceeded
Shaded cells indicate exceedance of the MCL, MCLL, PCE, or CEQAL
NA = chemical not analyzed

Concentrations in milligrams per liter (mg/l)
Analyzed using USEPA Method 5030B/8260B

GROUND WATER SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS RESULTS

USPS - Aurora MPO
525 N Broadway, Aurora, Illinois
#0890050033, ILD981795453
#01031-03

BORING ID	DATE SAMPLED	Acanaphthene	Acanaphthylene	Anthracene	Benidine	Benz(a)-anthracene	Benz(a)-pyrene	Benz(b)-fluoranthene	Benz(k)-fluoranthene	Benz(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	bis(2-chloroethoxy)methane	bis(2-chloroethyl)ether	bis(2-chloroisopropyl)ether	bis(2-ethylhexyl)phthalate	4-Bromophenyl-phenyl ether	Butylbenzylphthalate	Carbazole	4-Chloroaniline	4-Chloro-3-methylphenol	2-Chloronaphthalene	3-Chlorophenol	4-Chlorophenyl-phenyl ether	Chrysene
MW-1/SB-5	7/18/2006	<0.010	<0.010	<0.005	<0.010	<0.00013	<0.0002	<0.00018	<0.00017	<0.0004	<0.050	<0.020	<0.010	<0.010	<0.010	<0.005	<0.010	<0.010	<0.010	<0.010	<0.020	<0.010	<0.010	<0.010	<0.0015
MW-2/SB-2	7/18/2006	<0.010	<0.010	<0.005	<0.010	<0.00013	<0.0002	<0.00018	<0.00017	<0.0004	<0.050	<0.020	<0.010	<0.010	<0.010	<0.005	<0.010	<0.010	<0.010	<0.010	<0.020	<0.010	<0.010	<0.010	<0.0015
MW-3/SB-9	7/18/2006	<0.010	<0.010	<0.005	<0.010	0.00068	<0.0002	<0.00018	<0.00017	<0.0004	<0.050	<0.020	<0.010	<0.010	<0.010	<0.005	<0.010	<0.010	<0.010	<0.010	<0.020	<0.010	<0.010	<0.010	<0.0015
SW-1	7/17/2006	<0.010	<0.010	<0.005	<0.010	<0.00013	<0.0002	<0.00018	<0.00017	<0.0004	<0.050	<0.020	<0.010	<0.010	<0.010	<0.005	<0.010	<0.010	<0.010	<0.010	<0.020	<0.010	<0.010	<0.010	<0.0015
SW-2	7/17/2006	<0.010	<0.010	<0.005	<0.010	<0.00013	<0.0002	<0.00018	<0.00017	<0.0004	<0.050	<0.020	<0.010	<0.010	<0.010	<0.005	<0.010	<0.010	<0.010	<0.010	<0.020	<0.010	<0.010	<0.010	<0.0015
SW-3	7/17/2006	<0.010	<0.010	<0.005	<0.010	<0.00013	<0.0002	<0.00018	<0.00017	<0.0004	<0.050	<0.020	<0.010	<0.010	<0.010	<0.005	<0.010	<0.010	<0.010	<0.010	<0.020	<0.010	<0.010	<0.010	<0.0015
REMEDIAL OBJECTIVES	CLASS I	0.420	—	2.1	—	0.00013	0.0002	0.00018	0.00017	—	28	—	—	0.01	—	0.006	—	—	1.4	0.028	—	—	0.035	—	0.0015
	CLASS II	2.100	—	10.5	—	0.00065	0.002	0.0009	0.00085	—	28	—	—	0.01	—	0.06	—	7.0	0.028	—	—	0.175	—	—	0.007

NOTES: 1. Ground water at the site meets the definition of Class 2 as per 35 IAC 620 and is described in the Site Characterization Report for the site.
2. Ground water standards not applicable to surface water samples obtained. Surface water standards applied on a site-by-site basis.

NA = chemical not analyzed

Concentrations in milligrams per liter (mg/L)
Analyzed using USEPA Method 3510C/8270C

TABLE 5 (continued)

GROUND WATER SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS RESULTS

USPS - Aurora MPO

525 N Broadway Aurora, Illinois

#0890050033, ILD981795453

I #01031-03

BORING ID	DATE SAMPLED	Dibenz(a,h)-anthracene	Dibenzofuran	Di-n-butyl phthalate	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dichlorophenol	3,3-Dichlorobenzidine	Diethyl phthalate	2,4-Dimethylphenol	Dimethyl phthalate	4,6-Dinitro-2-methylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	Di-n-octylphthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane
MW-1/SB-5	7/18/2006	<0.0003	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.002	<0.002	<0.010	<0.010	<0.010	<0.005
MW-2/SB-2	7/18/2006	<0.0003	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.002	<0.002	<0.010	<0.010	<0.010	<0.005
MW-3/SB-9	7/18/2006	<0.0003	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.002	0.004	<0.010	<0.010	<0.010	<0.005
SW-1	7/17/2006	<0.0003	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.002	<0.002	<0.010	<0.010	<0.010	<0.005
SW-2	7/17/2006	<0.0003	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.002	<0.002	<0.010	<0.010	<0.010	<0.005
SW-3	7/17/2006	<0.0003	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.002	<0.002	<0.010	<0.010	<0.010	<0.005
REMEDIALATION OBJECTIVES	CLASS I	0.0003	—	0.700	0.60	—	0.076	0.021	0.020	6.60	0.140	—	—	0.140	0.00002	0.00031	0.140	0.280	0.280	0.00006	—	0.05	0.007
	CLASS II	0.0015	—	3.60	1.60	—	0.376	0.021	0.100	6.60	0.140	—	—	0.140	0.00002	0.00031	0.700	1.40	1.40	0.0003	—	0.50	0.036

NOTES

- Ground water at the site meets the definition of Class 2 as per 35 IAC 620 and is described in the Site Characterization Report for the site.
- Ground water standards not applicable to surface water samples obtained. Surface water standards applied on a site-by-site basis.

Italics indicates Class II Ground Water Tier 1 Remediation Objective exceeded
 Bold indicates Class I Ground Water Tier 1 Remediation Objective exceeded
 Strikethrough indicates phthalates (M, B, D) are not analyzed per ILCS 245.105 (b)(1)
 NA = chemical not analyzed

Concentrations in milligrams per liter (mg/L)
 Analyzed using USEPA Method 8150C/8210C

TABLE 5 (continued)

GROUND WATER SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS RESULTS

USPS - Aurora MPO

525 N Broadway, Aurora, Illinois

#0890050033, ILD981795453

I #01031-03

BORING ID	DATE SAMPLED	Indeno(1,2,3-cd)pyrene	Isophorone	2-Methylnaphthalene	2-Methylphenol	3,4-Methylphenol	Naphthalene	2-Nitroaniline	3 Nitroaniline	4-Nitroaniline	Nitrobenzene	2-Nitrophenol	4 Nitrophenol	n-Nitrosodimethylamine	n Nitrosodiphenylamine	n Nitrosodi-n-propylamine	Pentachlorophenol	Phenol	Phenanthrene	Pyrene	1,2,4-Trichlorobenzene	2,4,6-Trichlorophenol	2,4,6-Trichlorophenol
MW-1/SB-5	7/18/2006	<0.0003	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.020	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.005	<0.002	<0.010	<0.010	<0.010
MW-2/SB-2	7/18/2006	<0.0003	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.020	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.005	<0.002	<0.010	<0.010	<0.010
MW-3/SB-9	7/18/2006	<0.0003	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.020	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	0.004	<0.010	<0.010	<0.010
SW-1	7/17/2006	<0.0003	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.020	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.005	<0.002	<0.010	<0.010	<0.010
SW-2	7/17/2006	<0.0003	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.020	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.005	<0.002	<0.010	<0.010	<0.010
SW-3	7/17/2006	<0.0003	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.020	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.005	<0.002	<0.010	<0.010	<0.010
REMEDIAL OBJECTIVES	CLASS I	0.00043	1.40	—	0.350	—	0.140	—	—	—	0.0035	—	—	—	0.0032	0.0018	0.001	0.100	—	0.210	0.07	0.700	0.01
	CLASS II	0.00215	1.40	—	0.350	—	0.220	—	—	—	0.0035	—	—	—	0.016	0.0018	0.005	0.100	—	1.05	1.00	3.50	0.05

NOTES

1. Ground water at the site meets the definition of Class 2 as per 35 IAC 620 and is described in the Site Characterization Report for the site.

2. Ground water standards not applicable to surface water samples obtained. Surface water standards applied on a site-by-site basis.

BOLD indicates Class I Ground Water Tier 1 Remediation Objective exceeded.

BOLD indicates Class I Ground Water Tier 1 Remediation Objective exceeded.

BOLD indicates Class I Ground Water Tier 1 Remediation Objective exceeded.

NA = chemical not analyzed

Concentrations in milligrams per liter (mg/L).

Analyzed using USEPA Method 8130C/8170C.

TABLE 6

GROUND WATER METALS ANALYSIS RESULTS

USPS - Aurora MPO

525 N Broadway, Aurora, Illinois

LPC#0890050033, ILD981795453

DEI #01031-03

BORING ID	DATE SAMPLED	pH	Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Cyanide	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
MW-1/SB-5	7/18/2006	6.91	<0.006	<0.002	0.002	0.002	0.002	0.062	<0.005	0.004	<0.0005	0.091	<0.002	<0.001	<0.002	0.046
MW-2/SB-2	7/18/2006	6.96	<0.006	<0.002	<0.001	<0.001	0.004	0.016	<0.005	0.016	<0.0005	0.014	<0.002	<0.001	<0.002	0.025
MW-3/SB-9	7/18/2006	6.91	<0.006	0.030	<0.001	<0.001	<0.001	0.008	<0.005	0.010	<0.0005	0.006	<0.002	<0.001	<0.002	0.010
SW-1 ²	7/17/2006	7.86	<0.006	<0.002	<0.001	<0.001	<0.001	0.003	<0.005	0.003	<0.0005	0.002	<0.002	<0.001	<0.002	0.022
SW-2	7/17/2006	7.91	<0.006	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.002	<0.0005	0.002	<0.002	<0.001	<0.002	0.009
SW-3	7/17/2006	7.89	<0.006	0.048	0.003	0.002	0.059	0.105	<0.005	0.122	<0.0005	0.099	<0.002	<0.001	<0.002	0.758
REMEDIALATION OBJECTIVES	CLASS I	-	0.006	0.050	0.004	0.005	0.100	0.650	0.200	0.0075	0.002	0.100	0.050	0.050	0.002	5.000
	CLASS II	-	0.024	0.200	0.050	0.050	1.000	0.650	0.600	0.100	0.010	2.000	0.050	-	0.020	10.000

NOTES

1 - Ground water at the site meets the definition of Class 2 as per 35 IAC 620 and is described in the Site Characterization Report for the site

2 - Ground water standards not applicable to surface water samples obtained. Surface water standards applied on a site-by-site basis

Italics indicates Class II Ground Water Tier 1 Remediation Objective exceeded

Bold indicates Class I Ground Water Tier 1 Remediation Objective exceeded

NA = chemical not analyzed

Concentrations in milligrams per liter (mg/l)

Analyzed using USEPA Methods 3010A/8010B and 7470A for mercury

TABLE 7**Ground Water and Boring Elevation Data**

USPS - Aurora MPO

525 N. Broadway, Aurora, Illinois

LPC#0890050033, ILD981795453

DEI #01031-03

MW ID	GRADIENT POSITION	TOTAL DEPTH	TOC ELEV	GS ELEV	DATE MEASURED	DTW	GW ELEVATION	AVERAGE GW ELEVATION
MW-1/SB-5	UP	8.10	644.84	645.48	07/18/06	6.82	638.02	638.02
MW-2/SB-2	DOWN	14.50	645.60	645.88	07/18/06	13.00	632.60	632.60
MW-3/SB-9	DOWN	9.70	644.34	644.96	07/18/06	7.72	636.62	636.62
SB-1		5.00		645.56				
SB-3		5.50		638.56				
SB-4		7.50		638.01				
SB-6		11.50		645.86				
SB-7		10.00		645.99				
SB-8		8.00		639.08				
SB-10		10.00		645.74				
SB-11		7.50		643.52				
SB-12		10.20		641.98				
SB-13		8.00		643.51				

TABLE 8**Well Survey Data**

USPS - Aurora MPO

525 N. Broadway, Aurora, Illinois

LPC#0890050033, ILD981795453

DEI #01031-03

WELL ID #	APPROX. DISTANCE FROM SITE	TYPE OF WELL	DEPTH OF WELL (ft bgs)	YEAR OF INSTALLATION	OWNER NAME
32490	400-1,000	Eng	13	1988	IL Dept. of Transportation IL Rte 25 over Indian Creek
22766	1,000-2,500	Eng	14	1969	Kroeler et al.
28961	1,000-2,500	Water	140	1984	Wendel Merk
00675	1,000-2,500	Water	701	Not Listed	American Water Works
22630	1,000-2,500	Water	25	1967	Leriviera Apartments
00678	1,000-2,500	Water	150	1965	Aurora Packing Company
32491	2,500	Eng	20	1978	IL Dept. of Transportation High Street Bridge
00677	2,500-5,000	Water	620	1920	Aurora Ice Cream Co.
00679	2,500-5,000	Water	1414	1940	Tivoli Theatre
00681	3,700	Water	2260	1924	City of Aurora
23026	2,500-5,000	Eng	21	1970	Miss Valley Structural Steel
22548	2,500-5,000	Eng	21	1965	Grace Lutheran Church
22549	2,500-5,000	Eng	23	1975	Grace Lutheran Church
22555	2,500-5,000	Eng	26	1965	Grace Lutheran Church
22528	5,000	Eng	19	1966	Northgate Shopping Center

Table 9-Generalized Well Information From Within 4 miles of the Site

Use	SWL	Water from?	Aquifer Use
?Municipal	?	none provided	?
engineering test	?	none provided	?
Municipal	?	none provided	?
Municipal	?	none provided	?
Municipal	?	none provided	?
neutron log	?	none provided	?
Non-Community Public	?	none provided	?
Private water	?	none provided	?
stratigraphic test	?	none provided	?
water	?	none provided	?
Municipal	211	none provided	? Maquoketa?
? Municipal?	577	none provided	? Platteville (Ordovician) ?
irrigation	10	none provided (Quat Alluvium?)	? Quaternary ?
private water	25	none provided	? Quaternary ?
Private water	15	none provided (dnft from 0-30)	? Quaternary ?
water	4	none provided	? Quaternary ?
Private water	40	none provided	? Quaternary?
Private water	40	none provided (lime at 40-140)	? Silurian ?
Private water	60	none provided	? Silurian ?
Private water	75	dolomite at 300-320	Galena (Ordovician)
Commercial	30	from dolomite at 290-300	Galena/Plateville (Ordovician)
irrigation	?	limestone at 290-630	Galena/Plateville (Ordovician)
Municipal	575'	from Galesville sand at 1335-1515	Galesville (Cambrian, Class I aquifer)
Municipal	176	Galesville at "0-0"	Galesville (Cambrian, Class I aquifer)
Municipal	655'	from Galesville sand at 1335-1515	Galesville (Cambrian, Class I aquifer)
business	462	sandstone at 580-920	Glenwood (Ordovician)
Municipal	461	sandstone at 647-1332	Glenwood (Ordovician)
Private water	490	sandstone at 675-800	Glenwood (Ordovician)
Private water	650	sandstone at 645-700	Glenwood (Ordovician)
Test Hole	460	sandstone at 580-780	Glenwood (Ordovician)
business	40	rock at 170-260	Maquoketa
commercial	32	from shale at 158-285	Maquoketa
Municipal	50	? Limestone at 130-151?	Maquoketa
Non-Community Public	60	limestone at 165-200	Maquoketa
non-potable water	30	limestone at 114-320	Maquoketa
Private water	40'	from limestone at 70-160	Maquoketa
Private water	60	from orange and white lime with soft shale at 170'	Maquoketa
Private water	-	from limestone at 210-260	Maquoketa
Private water	30	limestone at 150-180	Maquoketa
Private water	40	limestone & shale at 100-200	Maquoketa
Private water	55	limestone at 127-200	Maquoketa
Private water	40	limestone at 145-200	Maquoketa
Private water	68	limestone at 105-160	Maquoketa
Private water	50	limestone at 131-160	Maquoketa
Private water	20	hard green shale at 102-180	Maquoketa
Private water	28	limestone at 122-140	Maquoketa
private water	49	limestone at 116-135	Maquoketa
Private water	47	limestone at 116-135	Maquoketa
Private water	80	limestone at 150-235	Maquoketa
Private water	15	rock at 100-140	Maquoketa
Private water	50	hard gray shale at 210-220	Maquoketa
Private water	100	shale at 140-220	Maquoketa
Private water	86	limestone at 110-200	Maquoketa
Private water	120	rock at 120-160	Maquoketa
Private water	60	limestone at 97-283	Maquoketa
Private water	180	limestone at 99-215	Maquoketa
Private water	85	lime at 140-155	Maquoketa
Private water	65	limestone at 161-173	Maquoketa
Private water	61	limestone at 180-260	Maquoketa
Private water	80	limestone at 128-185	Maquoketa
Private water	45	lime at 155-260	Maquoketa

Private water	60	rock at 130-140	Maquoketa
Private water	26	limestone at 124-150	Maquoketa
Private water	10	limestone at 111-150	Maquoketa
Private water	30	shale & rock at 155-180	Maquoketa
Private water	50	rock & shale at 196-202	Maquoketa
Private water	20	limestone at 110-140	Maquoketa
Private water	15	limestone at 110-150	Maquoketa
Private water	30	limestone at 160-180	Maquoketa
Private water	30	limestone at 117-180	Maquoketa
Private water	70	salt & pepper rock at 174-179	Maquoketa
Private water	20	rock at 130-160	Maquoketa
Private water	20	rock at 130-160	Maquoketa
Private water	30	shale & rock at 138-160	Maquoketa
Private water	65	limestone at 117-200	Maquoketa
Private water	110	rock at 175-210	Maquoketa
Private water	?	limestone at 102-200	Maquoketa
Private water	18	gray rock at 150-200	Maquoketa
Private water	?	limestone 128-150	Maquoketa
water	70	limestone at 140-163	Maquoketa
Private water	30	limestone at 285-305	Maquoketa/Galena (Ordovician)
Private water	60	limestone at 92-300	Maquoketa/Galena (Ordovician)
Private water	135	limestone at 295-320	Maquoketa/Galena (Ordovician)
industrial	45	from limestone at 285-305	Ordovician (Maquoketa/Galena)
Municipal	530	? (Platville at 325-700?)	Platteville (Ordovician)
irrigation	290	sandstone at 320-540	Platteville/Glenwood (Ordovician)
Private water	300	sandstone at 535-580	Platteville/Glenwood (Ordovician)
?	13	drift	Quaternary
Commercial	19	from sand & gravel at 28-35	Quaternary
irrigation	7	sand & gravel at 9-29	Quaternary
Monitoring	5	glacial till at 2-8	Quaternary
Monitoring	5	glacial till at 1-9	Quaternary
Monitoring	5	glacial till at 5-10	Quaternary
Monitoring	9	glacial till at 5-10	Quaternary
Monitoring	26	glacial till at 26-39	Quaternary
Monitoring	5	glacial till at 5-10	Quaternary
Monitoring	6	ground at 3-5	Quaternary
Monitoring	4	ground at 3-5	Quaternary
Monitoring	7	drift at 7-15	Quaternary
Monitoring	8	drift at 8-15	Quaternary
Monitoring	5	drift at 5-15	Quaternary
Monitoring	21	sand at 3-21	Quaternary
Monitoring	10	sand & gravel at 10-15	Quaternary
Monitoring	10	sand & gravel at 10-20	Quaternary
Monitoring	20	sand & gravel at 10-20	Quaternary
Municipal	17	? (glacial drift clay 0-42?)	Quaternary
Municipal	14	sand & gravel at 8-25	Quaternary
Municipal	22	sand & gravel	Quaternary
Municipal	?	sand & gravel	Quaternary
Observation	?	from sand & gravel at 32-52	Quaternary
observation	?	from sand & gravel at 32-52	quaternary
Observation	?	from sand & gravel at 21-31	quaternary
Observation	?	from sand & gravel at 26-36	quaternary
Private water	10	from sand at 10-175	Quaternary
Private water	15	gravel	Quaternary
Private water	20	drift from 0-46 (?)	Quaternary
Private water	15	glacial drift	Quaternary
Private water	20	broken rock at 20-55	Quaternary
Private water	18	drift	Quaternary
private water	15	gravel/drift	Quaternary
Private water	?	glacial drift	Quaternary
Private water	?	drift	Quaternary
Private water	15	drift to 65	quaternary
Private water	20	drift	quaternary
Private water	15	drift	Quaternary

Test Hole	14	glacial drift	Quaternary
Test Hole	12	glacial drift	Quaternary
Test Hole	17	drift at 41-61	Quaternary
Municipal	13	drift at 70-125	Quaternary/Silurian
Non-Community Public	20	rock at 20-140	Quaternary/Silurian
Private water	20	from rock at 20-120	Quaternary/Silurian
Private water	35	from rock at 35-100'	Quaternary/Silurian
Private water	15	rock at 15-100	Quaternary/Silurian
Private water	12	rock at 12-100	Quaternary/Silurian
Private water	5	rock at 5-100	Quaternary/Silurian
Private water	20	rock at 20-120	Quaternary/Silurian
Private water	4	rock at 4-80	Quaternary/Silurian
Private water	15	rock at 15-120	Quaternary/Silurian
Private water	30	rock at 30-120	Quaternary/Silurian
Private water	15	rock at 15-120	Quaternary/Silurian
Private water	30	rock at 0-140	Quaternary/Silurian
Private water	20	rock at 20-80	Quaternary/Silurian
Private water	20	broken rock at 20-60	Quaternary/Silurian
Private water	25	rock at 25-100	Quaternary/Silurian
Private water	30	clay at 30-100	Quaternary/Silurian
Private water	15	gravel at 45-105	Quaternary/Silurian
Private water	20	rock at 20-120	Quaternary/Silurian
Private water	30	rock at 0-80	Quaternary/Silurian
Private water	10	rock at 10-120	Quaternary/Silurian
Private water	30	clay at 30-100	Quaternary/Silurian
Test Hole	49	drift at 90-135	Quaternary/Silurian
Test Hole	46	drift at 90-135	Quaternary/Silurian
Test Hole	42	drift at 90-135	Quaternary/Silurian
Test Hole	40	drift at 90-135	Quaternary/Silurian
?	14	limestone at 65-110	Silurian
business	12	limestone at 77-250	Silurian
commercial	22	limestone at 112-360	Silurian
commercial	22	limestone at 60-120	Silurian
commercial	30	lime & shale at 96-150	Silurian
Irrigation	10	limestone at 40-140	Silurian
irrigation	18	brown rock at 95-200	Silurian
irrigation	40	limestone at 69-180	Silurian
irrigation	40	limestone at 69-180	Silurian
irrigation	40	limestone at 72-140	Silurian
irrigation	30	limestone at 43-160	Silurian
irrigation	45	limestone at 85-180	Silurian
Municipal	40	limestone at 40-160	Silurian
Municipal	40	limestone at 40-160	Silurian
Non-Community Public	38	lime at 47-125	Silurian
Non-Community Public	56	limestone at 56-110	Silurian
Private water	20	from rock at 20-100	Silurian
Private water	25	from gray lime at 95-134	Silurian
Private water	80	from lime & shale at 80-140	Silurian
Private water	40	lime & shale at 40-140	Silurian
Private water	40	lime & shale at 40-140	Silurian
Private water	80	lime and shale at 80-140	Silurian
Private water	35	rock at 55-130	Silurian
Private water	40	rock at 40-135	Silurian
Private water	20	limestone at 40-100	Silurian
Private water	8	limestone at 60-76	Silurian
Private water	40	limestone at 51-140	Silurian
Private water	40	rock at 57-140	Silurian
Private water	60	rock at 75-120	Silurian
Private water	40	rock at 40-160	Silurian
Private water	15	limestone at 48-135	Silurian
Private water	28	limestone at 68-130	Silurian
Private water	25	rock at 59-80	Silurian
Private water	20	limestone at 55-140	Silurian
Private water	30	rock at 60-117	Silurian

Private water	30		limestone at 75-115	Silurian
Private water	60		rock at 0-160	Silurian
Private water	22		limestone at 31-120	Silurian
Private water	50		rock at 109-120	Silurian
Private water	26		limestone at 55-127	Silurian
Private water	20		rock at 48-120	Silurian
Private water	20		rock at 74-75	Silurian
Private water	25		limestone at 37-130	Silurian
Private water	20		rock at 20-120	Silurian
private water	10		rock at 10-120	Silurian
Private water	30		rock at 30-130	Silurian
Private water	20		limestone at 79-125'	Silurian
Private water	30		rock at 30-140	Silurian
Private water	35		limestone at 94-118	Silurian
Private water	20		limestone at 43-57	Silurian
Private water	20		limestone at 44-60	Silurian
Private water	15		shale at 90-100	Silurian
Private water	15		rock at 42-80	Silurian
Private water	10		rock at 10-100	Silurian
Private water	8		rock at 31-100	Silurian
Private water	15		limestone at 44-58	Silurian
Private water	20		gray limestone at 76-78	Silurian
Private water	15		rock at 31-140	Silurian
Private water	15		rock at 75-140	Silurian
Private water	10		rock at 45-100	Silurian
Private water	40		rock at 40-120	Silurian
Private water	20		rock at 32-120	Silurian
Private water	14		limestone at 50-120	Silurian
Private water	10		shale at 45-100	Silurian
Private water	10		limestone at 65-100	Silurian
Private water	10		rock from 30-140	Silurian
Private water	20		limestone from 34-100	Silurian
Private water	30		rock at 44-100	Silurian
Private water	30		limestone at 56-130	Silurian
Private water	30		broken rock at 75-82	Silurian
Private water	20		gray rock at 100-120	Silurian
Private water	20		rock at 20-120	Silurian
Private water	35		limestone at 43-130	Silurian
Private water	20		limestone at 39-100	Silurian
Private water	40		rock at 40-140	Silurian
Private water	28		limestone at 42-100	Silurian
Private water	15		limestone at 49-100	Silurian
Private water	30		rock at 50-120	Silurian
Private water	50		limestone at 43-90	Silurian
Private water	15		rock at 15-80	Silurian
Private water	15		limestone at 47-105	Silurian
Private water	12		limestone at 41-120	Silurian
Private water	35		limestone at 47-125	Silurian
Private water	24		rock at 65-100	Silurian
Private water	30		rock at 30-120	Silurian
Private water	30		limestone at 53-127	Silurian
Private water	20		rock at 0-130	Silurian
Private water	12		limestone at 41-120	Silurian
Private water	20		rock at 20-120	Silurian
Private water	40		rock at 40-60	Silurian
Private water	12		rock at 12-100	Silurian
Private water	40		rock at 65-120	Silurian
Private water	30		broken rock at 75-82	Silurian
Private water	30		broken rock at 75-82	Silurian
Private water	20		grey rock at 100-120	Silurian
Private water	85		limestone at 80-120	Silurian
Private water	20		rock at 20-120	Silurian
Private water	30		rock at 80-140	Silurian
Private water	35		rock at 35-140	Silurian

Private water	40	white lime at 40-80	Silunan
Private water	40	rock at 40-100	Silunan
Private water	40	rock at 0-100	Silunan
Private water	60	rock at 70-90	Silunan
Private water	40	gravel at 105-113	Silunan
Private water	25	limestone at 42-100	Silunan
Private water	3	limestone at 41-112	Silunan
private water	25	rock at 25-80	Silunan
private water	25	limestone at 85-110	Silunan
Private water	40	rock at 40-120	Silunan
Private water	20	rock at 20-100	Silunan
Private water	15	rock at 15-95	Silunan
Private water	20	rock at 20-120	Silunan
Private water	20	limestone at 20-85	Silunan
Private water	30	rock at 30-120	Silunan
Private water	15	rock at 15-120	Silunan
Private water	15	limestone at 67-120	Silunan
Private water	21	limestone at 53-77	Silunan
Private water	15	limestone at 76-100	Silunan
Private water	45	limestone at 60-100	Silunan
Private water	15	rock at 15-120	Silunan
Private water	15	rock at 15-120	Silunan
Private water	10	limestone at 54-110	Silunan
Private water	40	limestone at 70-95	Silunan
Private water	25	rock at 25-140	Silunan
Private water	15	rock at 15-100	Silunan
Private water	15	limestone at 80-110	Silunan
Private water	15	white rock at 55-120	Silunan
Private water	20	rock at 20-120	Silunan
Private water	15	limestone at 81-100	Silunan
Private water	30	rock at 30-120	Silunan
Private water	32	limestone at 49-80	Silunan
Private water	15	rock at 100-120	Silunan
Private water	15	rock at 100-120	Silunan
Private water	15	rock at 100-120	Silunan
Private water	20	limestone at 59-100	Silunan
Private water	30	rock at 80-120	Silunan
Private water	20	rock at 0-110	Silunan
Private water	20	limestone at 65-70	Silunan
Private water	18	limestone at 82-90	Silunan
Private water	15	rock at 0-100	Silunan
Private water	27	rock 45-100	Silunan
Private water	20	grey lime at 85-120	Silunan
Private water	20	rock at 20-100	Silunan
Private water	4	rock at 40-120	Silunan
Private water	50	brown rock at 75-140	Silunan
private water	40	rock at 86-90	Silunan
Private water	55	limestone at 104-105	Silunan
Private water	?	rock at 105-120	Silunan
Private water	50	limestone at 35-106	Silunan
Private water	40	lime at 45-113	Silunan
Private water	35	limestone at 84-93	Silunan
Private water	?	limestone at 40-118	Silunan
Private water	40	limestone at 40-120	Silunan
Private water	15	rock at 15-110	Silunan
Private water	36	limestone at 61-98	Silunan
Private water	48	limestone at 53-105	Silunan
Private water	10	rock at 4-150	Silunan
Private water	22	limestone at 73-94	Silunan
Private water	20	white rock 63' & 100-200	Silunan
Private water	30	rock at 30-120	Silunan
Private water	20	rock at 72-100	Silunan
Private water	20	limestone at 70-120	Silunan
Private water	15	rock at 15-76	Silunan

Private water	20	rock at 94-120	Silurian
Private water	30	rock from 60-100	Silurian
Subdivision water supply	15	rock at 15-120	Silurian
water	30'	from shale at 30-120	Silurian
water	12'	from limestone 12-140	Silurian
water	12'	from limestone 12-141	Silurian
water	15	from limestone at 15-100	Silurian
water	60	from limestone at 60-120'	Silurian
water	15	from niagra lime at 65-95	Silurian
water	20	from shale & rock at 20-100	Silurian
water	18	limestone at 51-83	Silurian
water	8	lime at 55-87	Silurian
water	16	lime at 49-93	Silurian
?	?	limestone at 128-156	Silurian/Ordovician
industrial	80	limestone at 120-205	Silurian/Ordovician
irrigation	40	from rock at 98-110	Silurian/Ordovician
irrigation	30	limestone at 40-187	Silurian/Ordovician
irrigation	50	limestone at 75-240	Silurian/Ordovician
irrigation	50	limestone at 75-240	Silurian/Ordovician
irrigation	15	limestone at 66-220	Silurian/Ordovician
irrigation	?	white and grey rock at 110-160	Silurian/Ordovician
irrigation	62	limestone at 118-345	Silurian/Ordovician
irrigation	40	limestone at 71-240	Silurian/Ordovician
Municipal	45	limestone at 40-207	Silurian/Ordovician
Municipal	30	limestone at 91-183	Silurian/Ordovician
Municipal	45	limestone at 40-190	Silurian/Ordovician
Non-Community Public	80	limestone at 58-165	Silurian/Ordovician
Non-Community Public	20	white rock 60' & 97-220	Silurian/Ordovician
Private water	70	from rock & shale at 70-200	Silurian/Ordovician
Private water	60	from rock at 60-140	Silurian/Ordovician
Private water	40	from gray lime at 40-140	Silurian/Ordovician
Private water	30	from gray lime & shale at 30-140	Silurian/Ordovician
private water	53	from limestone at 30-200	Silurian/Ordovician
Private water	30	white lime at 30-300	Silurian/Ordovician
Private water	20	limestone at 100-290	Silurian/Ordovician
Private water	26	limestone at 71-160	Silurian/Ordovician
Private water	65	limestone at 69-180	Silurian/Ordovician
Private water	65	limestone at 135-240	Silurian/Ordovician
Private water	75	limestone at 91-175	Silurian/Ordovician
Private water	70	rock at 70-160	Silurian/Ordovician
Private water	80	rock at 80-160	Silurian/Ordovician
Private water	70	rock at 70-160	Silurian/Ordovician
Private water	60	rock at 60-160	Silurian/Ordovician
Private water	75	limestone at 110-170	Silurian/Ordovician
Private water	80	rock at 80-160	Silurian/Ordovician
Private water	40	white & gray lime at 126-140	Silurian/Ordovician
Private water	40	rock at 40-140	Silurian/Ordovician
Private water	21	lime at 110-160	Silurian/Ordovician
private water	60	limestone at 114-165	Silurian/Ordovician
Private water	25	limestone at 47-145	Silurian/Ordovician
Private water	15	yellow rock at 90-140	Silurian/Ordovician
Private water	60	white rock at 50-180	Silurian/Ordovician
Private water	70	limestone at 72-142	Silurian/Ordovician
Private water	10	white rock at 92-120	Silurian/Ordovician
Private water	41	limestone at 94-140	Silurian/Ordovician
Private water	60	limestone at 56-180	Silurian/Ordovician
Private water	?	rock at 0-160	Silurian/Ordovician
Private water	70	gray lime at 96-140	Silurian/Ordovician
Private water	?	limestone at 78-145	Silurian/Ordovician
Private water	85	limestone at 80-160	Silurian/Ordovician
Private water	15	limestone & shale at 55-140	Silurian/Ordovician
Private water	20	limestone at 54-120	Silurian/Ordovician
Private water	15	limestone at 54-140	Silurian/Ordovician
Private water	30	limestone at 39-135	Silurian/Ordovician

Private water	30	limestone at 46-160	Silurian/Ordovician
Private water	33	limestone at 42-125	Silurian/Ordovician
Private water	40	white rock at 67-180	Silurian/Ordovician
Private water	60	limestone at 76-150	Silurian/Ordovician
Private water	53	limestone at 75-150	Silurian/Ordovician
Private water	40	rock at 105-142	Silurian/Ordovician
Private water	50	rock at 68-140	Silurian/Ordovician
Private water	40	rock at 95-140	Silurian/Ordovician
private water	?	limestone at 78-145	Silurian/Ordovician
Private water	30	limestone at 56-130	Silurian/Ordovician
Private water	60	limestone at 94-147	Silurian/Ordovician
Private water	90	limestone at 92-215	Silurian/Ordovician
Private water	90	limestone at 90-240	Silurian/Ordovician
Private water	40	limestone at 70-130	Silurian/Ordovician
Private water	85	limestone at 97-205	Silurian/Ordovician
Private water	51	limestone at 91-120	Silurian/Ordovician
Private water	50	limestone at 76-160	Silurian/Ordovician
Private water	90	limestone at 94-200	Silurian/Ordovician
Private water	68	limestone at 96-180	Silurian/Ordovician
Private water	58	limestone at 94-132	Silurian/Ordovician
Private water	85	limestone at 85-200	Silurian/Ordovician
Private water	60	yellow and white lime at 98-160	Silurian/Ordovician
Private water	60	limestone at 65-180	Silurian/Ordovician
Private water	65	limestone at 74 to 170	Silurian/Ordovician
Private water	85	limestone at 73-200	Silurian/Ordovician
Private water	38	limestone at 77-110	Silurian/Ordovician
Private water	70	rock at 70-220	Silurian/Ordovician
Private water	40	rock at 115-160	Silurian/Ordovician
Private water	40	rock at 40-180	Silurian/Ordovician
Private water	30	shale at 0-140	Silurian/Ordovician
Private water	42	rock at 42-180	Silurian/Ordovician
Private water	45	rock at 0-140	Silurian/Ordovician
Private water	40	rock at 0-120	Silurian/Ordovician
Private water	40	rock at 40-140	Silurian/Ordovician
Private water	45	limestone at 110-160	Silurian/Ordovician
Private water	30	limestone at 118-155	Silurian/Ordovician
Private water	30	limestone at 105-165	Silurian/Ordovician
Private water	50	rock w/hard shale at 140-160	Silurian/Ordovician
Private water	60	rock at 0-140	Silurian/Ordovician
Private water	90	rock at 90-220	Silurian/Ordovician
Private water	50	rock at 60-200	Silurian/Ordovician
Private water	65	limestone at 59-175	Silurian/Ordovician
Private water	60	rock at 0-280	Silurian/Ordovician
Private water	70	rock at 70-300	Silurian/Ordovician
Private water	130	shale at 130-220	Silurian/Ordovician
Private water	50	rock at 55-400	Silurian/Ordovician
Private water	30	rock at 30-220	Silurian/Ordovician
Private water	50	limestone at 117-138	Silurian/Ordovician
private water	20	rock at 112-120	Silurian/Ordovician
Private water	30	lime/shale at 30-160	Silurian/Ordovician
Private water	25	limestone at 93-110	Silurian/Ordovician
Private water	22	limestone at 112-135	Silurian/Ordovician
Private water	20	shale at 20-160	Silurian/Ordovician
Private water	40	shale at 40-140	Silurian/Ordovician
Private water	20	shale at 20-140	Silurian/Ordovician
Private water	40	shale at 40-140	Silurian/Ordovician
Private water	16	limestone at 76-120	Silurian/Ordovician
Private water	20	rock at 72-120	Silurian/Ordovician
Private water	40	limestone at 76-140	Silurian/Ordovician
Private water	20	rock at 60-160	Silurian/Ordovician
Private water	15	limestone at 80-127	Silurian/Ordovician
Private water	30	limestone at 65-105	Silurian/Ordovician
Private water	25	limestone at 75-175	Silurian/Ordovician
Private water	?	shale/sandstone 0-150	Silurian/Ordovician

Private water	18		limestone at 72-110	Silurian/Ordovician
Private water	25		limestone at 85-130	Silurian/Ordovician
Private water	30		limestone at 90-130	Silurian/Ordovician
Private water	18		limestone at 78-120	Silurian/Ordovician
Private water	10		limestone at 82-120	Silurian/Ordovician
Private water	?		limestone at 71-130	Silurian/Ordovician
Private water	20		limestone at 58-120	Silurian/Ordovician
Private water	60		rock at 60-200	Silurian/Ordovician
Private water	70		limestone at 88-145	Silurian/Ordovician
Private water	45		rock at 45-216	Silurian/Ordovician
Private water	?		limestone at 102-130	Silurian/Ordovician
private water	?		limestone at 96-115	Silurian/Ordovician
private water	?		limestone at 96-115	Silurian/Ordovician
private water	?		limestone at 96-115	Silurian/Ordovician
private water	45		rock at 117-160	Silurian/Ordovician
Private water	60		rock at 60-230	Silurian/Ordovician
Private water	60		rock at 60-240	Silurian/Ordovician
Private water	60		limestone at 70-270	Silurian/Ordovician
Private water	50		rock at 50-140	Silurian/Ordovician
Private water	90		limestone at 83-183	Silurian/Ordovician
Private water	80		shale at 80-220	Silurian/Ordovician
Private water	30		limestone at 73-160	Silurian/Ordovician
Private water	30		limestone at 65-185	Silurian/Ordovician
Private water	45		limestone at 76-175	Silurian/Ordovician
Private water	80		rock at 80-160	Silurian/Ordovician
Private water	50		rock at 50-120	Silurian/Ordovician
Private water	54		limestone at 48-150	Silurian/Ordovician
Private water	55		limestone at 106-150	Silurian/Ordovician
Private water	40		rock at 130-200	Silurian/Ordovician
Private water	40		rock at 110-180	Silurian/Ordovician
Private water	30		limestone at 73-160	Silurian/Ordovician
Private water	30		limestone at 65-185	Silurian/Ordovician
Private water	10		lime at 105-160	Silurian/Ordovician
Private water	?		rock at 10-180	Silurian/Ordovician
Private water	60		rock at 60-220	Silurian/Ordovician
Private water	98		limestone at 98-190	Silurian/Ordovician
Private water	100		limestone at 86-225	Silurian/Ordovician
Private water	20		rock at 20-160	Silurian/Ordovician
Private water	10		rock at 0-150	Silurian/Ordovician
Private water	80		limestone at 79-220	Silurian/Ordovician
Private water	25		rock at 95-180	Silurian/Ordovician
Private water	30		rock at 90-180	Silurian/Ordovician
Private water	40		rock at 95-180	Silurian/Ordovician
Private water	15		yellow rock at 91-180	Silurian/Ordovician
Private water	20		white rock at 110-200	Silurian/Ordovician
Private water	30		rock at 94-180	Silurian/Ordovician
Private water	25		limestone at 80-140	Silurian/Ordovician
Private water	30		rock at 85-180	Silurian/Ordovician
Private water	20		rock at 80-180	Silurian/Ordovician
Private water	35		limestone at 70-160	Silurian/Ordovician
Private water	30		limestone at 71-160	Silurian/Ordovician
Private water	30		rock at 107-180	Silurian/Ordovician
Private water	30		white lime at 82-160	Silurian/Ordovician
Private water	21		white lime at 76-140	Silurian/Ordovician
Private water	40		limestone at 55-140	Silurian/Ordovician
Private water	25		rock at 95-160	Silurian/Ordovician
Private water	30		brown lime at 92-180	Silurian/Ordovician
Private water	30		rock at 80-180	Silurian/Ordovician
Private water	40		rock at 175-180	Silurian/Ordovician
Private water	20		yellow rock at 98-180	Silurian/Ordovician
Private water	30		rock at 61-180	Silurian/Ordovician
Private water	40		rock at 80-180	Silurian/Ordovician
Private water	17		limestone at 60-220	Silurian/Ordovician
Private water	28		limestone at 67-200	Silurian/Ordovician

Private water	20	yellow rock at 99-200	Silurian/Ordovician
Private water	20	white rock at 94-180	Silurian/Ordovician
Private water	20	limestone at 71-180	Silurian/Ordovician
Private water	20	rock at 90-180	Silurian/Ordovician
Private water	80	rock at 75-180	Silurian/Ordovician
Private water	80	limestone at 81-200	Silurian/Ordovician
Private water	?	limestone at 82-160	Silurian/Ordovician
Private water	80	limestone at 81-200	Silurian/Ordovician
Private water	?	limestone at 82-160	Silurian/Ordovician
semi-private	?	limestone at 46-200	Silurian/Ordovician
Subdivision water supply	?	dolomite at 96-185	Silurian/Ordovician
Subdivision water supply	?	dolomite at 136-176	Silurian/Ordovician
water	23'	from shale 42-168	Silurian/Ordovician
water	35'	from limestone @35-160	Silurian/Ordovician
water	40'	from rock 40-160	Silurian/Ordovician
water	28'	from limestone 112-121	Silurian/Ordovician
water	40	from limestone at 40-220	Silurian/Ordovician
water	67	from limestone at 67-300	Silurian/Ordovician
water	66	from lime at 105-172	Silurian/Ordovician
water	60	from limestone at 60-180	Silurian/Ordovician
water	?	from shale at 42-125	Silurian/Ordovician
water	25	from shale at 25-120	Silurian/Ordovician
water	20	from shale & rock at 20-140	Silurian/Ordovician
water	12	shale at 12-150	Silurian/Ordovician
water	60	limestone at 78-145	Silurian/Ordovician
water	30	limestone at 102-127	Silurian/Ordovician
Municipal	470	St Peter Galesville at 654-1315	St Peter SS (Ordovician, Class I Aquifer)



APPENDIX C – BORING LOGS AND MONITORING WELL CONSTRUCTION DIAGRAMS



DEUCHLER ENVIRONMENTAL, INC.
Borehole Engineers - Aurora, Illinois

LOG OF BORING SB-1

United States Postal Service
Aurora Main Post Office
525 North Broadway
Aurora, Illinois
DEI Project No. 01031-03

Date Started : 07/14/06
Date Completed : 07/14/06
Drilling Method : Geoprobe 6610DT
Sampling Method : Direct Push 2" Split Spoon
Driller : GeoServe

Logged By : M. Fisher
Depth to Water : none encountered
Project Number : 01031-03
Page : 1 of 1
Total Depth : 5.0 feet

Depth in Feet	Water Level	Surf Elev. 645.58	GRAPHIC	DESCRIPTION	Field Samples	% Rec- overy	PID (units)	Lab No.	Remarks
0				ASPHALT					
				FILL, sand and gravel base material for ASPHALT					
645									
1									
644									
2				FILL; sandy to silty clay, brick fragments	1	60	<1.0	6-3039-002	Laboratory sample obtained
643									
3									
642									
4				SILTY CLAY, gray transitioning to brown, dry					
641					2	100	<1.0	-	Bedrock at 5.0 feet
5				Bedrock encountered at 5.0 feet; brown Silurian Dolomite					
640									
6									

LOG OF BORING MW-2/SB-2

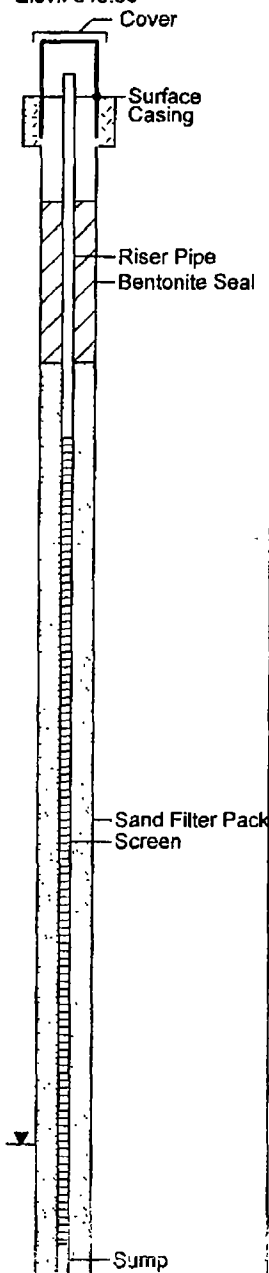
United States Postal Service
 Aurora Main Post Office
 525 North Broadway
 Aurora, Illinois
 DEI Project No. 01031-03

Date Started : 07/14/06
 Date Completed : 07/14/06
 Drilling Method : Geoprobe 6610DT
 Sampling Method : Direct Push 2" Split Spoon
 Driller : GeoServe

Logged By : M. Fisher
 Depth to Water : 13.00
 Project Number : 01031-03
 Page : 1 of 1
 Total Depth : 15.0 feet

Depth in Feet	Water Level	Surf. Elev 645.88	GRAPHIC	DESCRIPTION	Field Samples	% Rec- overy	PID (units)	Lab No.	Remarks
0				ASPHALT					
1		645		FILL, sand and gravel base material for ASPHALT					
2		644		FILL; dark grey silty clay with some sand; brick fragments; dry	1	40	<1.0	--	
3		643							
4		642		FILL; clay with some silt, dry, various debris present (some wood, brick frags)					
5		641							
6		640			2	60	<1.0	--	
7		639							
8		638		FILL; silty clay, moist, high plasticity, some brick frags					
9		637							
10		636		SILTY CLAY; grey, soft, moist	3	60	<1.0	6-3039-008	Lab Samp
11		635							
12		634		SANDY CLAY; tan, wet					
13		633			4	50	<1.0	--	Bedrock at 15 ft
14		632							
15		631		Bedrock brown Silurian Dolomite					

Well: MW-2
 Elev.: 645.60





DEUHLER ENVIRONMENTAL, INC.
Consulting Engineers - Aurora, Illinois

LOG OF BORING SB-3

United States Postal Service
Aurora Main Post Office
525 North Broadway
Aurora, Illinois
DEI Project No. 01031-03

Date Started : 07/17/06
Date Completed : 07/17/06
Drilling Method : Geoprobe 6610DT
Sampling Method : Direct Push 2" Split Spoon
Driller : GeoServe

Logged By : M. Fisher
Depth to Water : none encountered
Project Number : 01031-03
Page : 1 of 1
Total Depth : 5.5 feet

Depth in Feet	Water Level	Surf Elev 638.58	GRAPHIC	DESCRIPTION	Field Samples	% Rec- overy	PID (units)	Lab No.	Remarks
0				TOP SOIL; loam, organic material, plant roots					
638				FILL, sand and silt, some pebbles and misc debris					
1									
637									
2					1	30	<1.0	--	No lab sample obtained
636									
3									
635									
4				FILL; brown sand, some brick fragments					
634									
5					2	100	<1.0	--	Bedrock at 5.5 feet
633				BEDROCK; encountered at 5.5 feet, brown tan Silurian Dolomite					
6									



DEUCHLER ENVIRONMENTAL, INC.
Remedial Engineers - Aurora, Illinois

LOG OF BORING SB-4

United States Postal Service
Aurora Main Post Office
525 North Broadway
Aurora, Illinois
DEI Project No. 01031-03

Date Started : 07/17/06
Date Completed : 07/17/06
Drilling Method : Geoprobe 6610DT
Sampling Method : Direct Push 2" Split Spoon
Driller : GeoServe

Logged By : M. Fisher
Depth to Water : none encountered
Project Number : 01031-03
Page : 1 of 1
Total Depth : 7.5 feet

Depth in Feet	Water Level	Surf. Elev. 638.01	GRAPHIC	DESCRIPTION	Field Samples	% Rec- overy	PID (units)	Lab No.	Remarks
0	638		T T	TOP SOIL; loam, dark grey, organic material, plant roots					
				FILL; sorted fine brown sand					
1	637								
2	636				1	40	<10	-	
3	635								
4	634			FILL; sorted fine brown sand					
				SILTY CLAY; grey to brown, drier at top, moist toward bottom					
5	633								
6	632				2	100	<10	6-3048-001	Laboratory sample obtained
7	631								
8				BEDROCK; encountered at 7.5 feet; brown tan Silurian Dolomite					



DEUCHLER ENVIRONMENTAL, INC.
Remediation Engineers - Aurora, Illinois

LOG OF BORING MW-1/SB-5

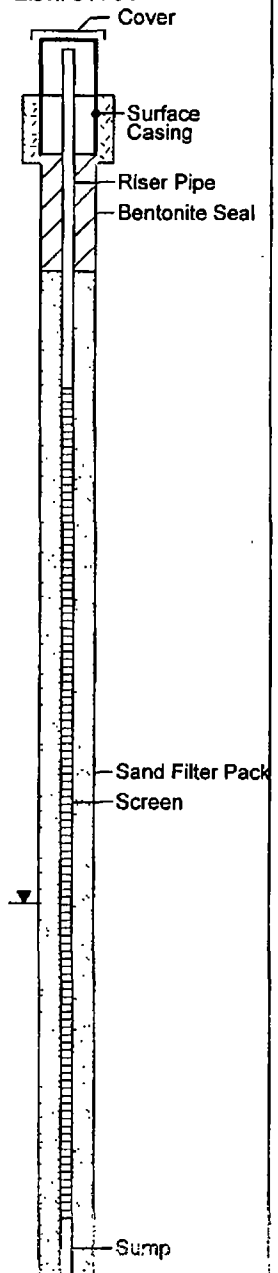
United States Postal Service
Aurora Main Post Office
525 North Broadway
Aurora, Illinois
DEI Project No. 01031-03

Date Started 07/14/06
Date Completed 07/14/06
Drilling Method Geoprobe 6610DT
Sampling Method Direct Push 2" Split Spoon
Driller GeoServe

Logged By M Fisher
Depth to Water 6.82
Project Number 01031-03
Page 1 of 1
Total Depth 10.0 feet

Depth in Feet	Water Level	Surf Elev. 645.48	GRAPHIC	DESCRIPTION	Field Samples	% Rec- overy	PID (units)	Lab No	Remarks
0				ASPHALT					
0.5		645		FILL, sand and gravel base material for ASPHALT					
1		644							
2		643		SILTY CLAY, medium to dark grey, moist, plastic	1	25	<1.0	-	
3		642							
4		641		SILTY CLAY; dark grey, moist, silt and water content increasing toward bottom of section					
5		640							
6		639		SANDY CLAY, brown, very moist to wet, moist, high plasticity, some brick frags	2	80	2.0	6-3039-001	Lab Samp
7		638							
8		637		SANDY CLAY; brown, wet, increasing sand content toward bottom of section, transitions to clayey sand					
9		636			3	100	<1.0	-	
10				BEDROCK; brown Silurian Dolomite					

Well: MW-1
Elev.: 644.84





DEUCHLER ENVIRONMENTAL, INC.
Consulting Engineers - Aurora, Illinois

LOG OF BORING SB-6

United States Postal Service
Aurora Main Post Office
525 North Broadway
Aurora, Illinois
DEI Project No. 01031-03

Date Started : 07/14/06
Date Completed : 07/14/06
Drilling Method : Geoprobe 6610DT
Sampling Method : Direct Push 2" Split Spoon
Driller : GeoServe

Logged By : M. Fisher
Depth to Water : 10 feet - Drilling
Project Number : 01031-03
Page : 1 of 1
Total Depth : 11.5 feet

Depth in Feet	Water Level	Surf. Elev. 645.86	GRAPHIC	DESCRIPTION	Field Samples	% Rec- overy	PID (units)	Lab No	Remarks
0				ASPHALT					
1		645		FILL; granular base material for ASPHALT					
2		644		FILL; dark grey/black sandy fill material, brick fragments, some clay; petroleum odor	1	50	<1.0	8-3039-007	Laboratory sample obtained
3		643							
4		642		SILTY CLAY; brown/buff, massive; increasing moisture content; some limestone fragments					
5		641							
6		640			2	50	<1.0	-	
7		639							
8		638		SANDY CLAY, brown; wet bedrock fragments toward bottom of section					
9		637							
10		636			3	60	<1.0	-	Bedrock at 11.5 feet
11		635							
12		634		BEDROCK; encountered at 11.5 feet; brown tan Silurian Dolomite					



DEUCHLER ENVIRONMENTAL, INC.
Remedial Engineers - Aurora, Illinois

LOG OF BORING SB-7

United States Postal Service
Aurora Main Post Office
525 North Broadway
Aurora, Illinois
DEI Project No. 01031-03

Date Started : 07/14/06
Date Completed : 07/14/06
Drilling Method : Geoprobe 6610DT
Sampling Method : Direct Push 2" Split Spoon
Driller : GeoServe

Logged By : M. Fisher
Depth to Water : 8 feet - Drilling
Project Number : 01031-03
Page : 1 of 1
Total Depth : 10.0 feet

Depth in Feet	Water Level	Surf. Elev. 645.99	GRAPHIC	DESCRIPTION	Field Samples	% Rec- overy	PID (units)	Lab No.	Remarks
0				ASPHALT					
1		645		FILL, granular base material for ASPHALT					
2		644		SANDY CLAY; brown, dry, medium plasticity	1	50	<1.0	--	
3		643							
4		642		FILL; rust colored medium sand fill material, sorted					
5		641							
6		640		SILTY CLAY; brown, moist, medium plasticity, some sand present toward bottom	2	50	<1.0	--	
7		639							
8		638		CLAYEY SAND, rust colored, wet					
9		637			3	50	<1.0	6-3039-006	Lab Samp, BR at 10.0 feet
10		636		BEDROCK; brown Silurian Dolomite					
11		635							

LOG OF BORING SB-8

United States Postal Service
Aurora Main Post Office
525 North Broadway
Aurora, Illinois
DEI Project No. 01C31-03

Date Started : 07/14/06
Date Completed : 07/14/06
Drilling Method : Geoprobe 6610DT
Sampling Method : Direct Push 2" Split Spoon
Driller : GeoServe

Logged By : M. Fisher
Depth to Water : 4 feet - Drilling
Project Number : 01031-03
Page : 1 of 1
Total Depth : 8.0 feet

Depth in Feet	Water Level	Surf. Elev. 639.08	GRAPHIC	DESCRIPTION	Field Samples	% Rec- overy	PID (units)	Lab No.	Remarks
0		639	TTT	TOPSOIL; grey, loamy/silty, dry					
1		638		FILL; black sandy loam fill material, wet at bottom of section					
2		637			1	50	<1.0	-	bedrock at 8.0 feet
3		636							
4		635							
5		634		SILTY CLAY; grey, massive, med/high plasticity, wet					
6		633			2	50	<1.0	6-3039-010	Laboratory sample obtained
7		632							
8				BEDROCK, brown Silurian Dolomite					



DEUCHLER ENVIRONMENTAL, INC.
Remediation Engineers - Aurora, Illinois

LOG OF BORING MW-3/SB-9

United States Postal Service
Aurora Main Post Office
525 North Broadway
Aurora, Illinois
DEI Project No 01031-03

Date Started : 07/14/06
Date Completed : 07/17/06
Drilling Method : Geoprobe 8610DT
Sampling Method : Direct Push 2" Split Spoon
Driller : GeoServe

Logged By : M. Fisher
Depth to Water : 7.72
Project Number : 01031-03
Page : 1 of 1
Total Depth : 10.5 feet

Depth in Feet	Water Level	Surf. Elev. 644.96	GRAPHIC	DESCRIPTION	Field Samples	% Rec- overy	PID (units)	Lab No.	Remarks
0				ASPHALT					
1		644		FILL, sand and gravel base material for ASPHALT					
2		643		FILL; silty clay, grey, stiff, brick fragment	1	25	<1.0	-	
3		642		FILL; black, loose, sandy, brick fragments, pebbles					
4		641		SILTY CLAY; grey, moist, soft, petroleum odor at 7.5 ft brown, very moist to wet, moist, high plasticity, some brick frags					
5		640							
6		639			2	50	10	-	BR at 10.5 ft
7		638							
8		637		SANDY CLAY; wet, grey to brown, petroleum odor	3	50	22	6-3039-008	Lab Samp
9		636							
10		635							
11		634		BEDROCK; brown Silurian Dolomite					

Well: MW-3
Elev.: 644.34

Cover

Surface Casing

Riser Pipe

Bentonite Seal

Sand Filter Pack

Screen









Sump

LOG OF BORING SB-10

United States Postal Service
 Aurora Main Post Office
 525 North Broadway
 Aurora, Illinois
 DEI Project No. 01031-03

Date Started : 07/14/08
 Date Completed : 07/14/08
 Drilling Method : Geoprobe 6610DT
 Sampling Method : Direct Push 2" Split Spoon
 Driller : GeoServe

Logged By : M. Fisher
 Depth to Water : 9 feet - Drilling
 Project Number : 01031-03
 Page : 1 of 1
 Total Depth : 10.0 feet

Depth in Feet	Water Level	Surf Elev. 645.74	GRAPHIC	DESCRIPTION	Field Samples	% Rec- overy	PID (units)	Lab No.	Remarks
0				ASPHALT					
0.5		645		FILL; medium sand base for ASPHALT					
1									
1.5		644							
2				SILTY CLAY; grey, very stiff with some sand	1	10	<1.0	-	
2.5									
3		643							
3.5									
4		642							
4.5				FILL; sandy, brick fragments, black combusted material					
5		641							
5.5				SILTY CLAY; stiff, dry, some rock fragments toward bottom of section					
6		640			2	100	<1.0	6-3038-003	Laboratory sample obtained
6.5									
7		639							
7.5				SILTY CLAY; dark grey, very stiff, dry					
8		638							
8.5				CLAYEY SAND, Brown to rust color clayey sand, wet					
9		637			3	60	<1.0	-	Bedrock at 10.0 feet
9.5									
10		636		BEDROCK: brown Silurian Dolomite					



DEUCHLER ENVIRONMENTAL, INC.
Remediation Engineers - Aurora, Illinois

LOG OF BORING SB-11

United States Postal Service
Aurora Main Post Office
525 North Broadway
Aurora, Illinois
DEI Project No. 01031-03

Date Started : 07/14/06
Date Completed : 07/14/06
Drilling Method : Geoprobe 6610DT
Sampling Method : Direct Push 2" Split Spoon
Driller : GeoServe

Logged By : M. Fisher
Depth to Water : none encountered
Project Number : 01031-03
Page : 1 of 1
Total Depth : 7.5 feet

Depth in Feet	Water Level	Surf. Elev 643.52	GRAPHIC	DESCRIPTION	Field Samples	% Rec- overy	PID (units)	Lab No.	Remarks
0				ASPHALT					
0.5		643		FILL; medium sand base for ASPHALT					
1									
1.5		642							
2					1	50	5.0	-	
2.5		641							
3				FILL; black sand fill material; slightly oily, slight petroleum odor					
3.5		640							
4				FILL; black sand fill material, very oily, strong petroleum odor (former tank backfill?)					
4.5		639							
5									
5.5		638							
6					2	50	12.0	6-3039-004	Lab samp BR at 7.5 ft
6.5		637							
7									
7.5		636		BEDROCK; brown Silurian Dolomite					
8									

LOG OF BORING SB-12

United States Postal Service
 Aurora Main Post Office
 525 North Broadway
 Aurora, Illinois
 DEI Project No. 01031-03

Date Started : 07/14/06
 Date Completed : 07/14/06
 Drilling Method : Geoprobe 6610DT
 Sampling Method : Direct Push 2" Split Spoon
 Driller : GeoServe

Logged By : M. Fisher
 Depth to Water : 9 feet - Drilling
 Project Number : 01031-03
 Page : 1 of 1
 Total Depth : 10.2 feet

Depth in Feet	Water Level	Surf. Elev. 641.98	GRAPHIC	DESCRIPTION	Field Samples	% Rec- overy	PID (units)	Lab No.	Remarks
0				ASPHALT					
1		641		FILL; medium sand base for ASPHALT					
2		640		SILTY CLAY; very stiff, dry, buff color	1	50	3.0	--	
3		639							
4		638		FILL; black sandy fill material, petroleum odor					
5		637							
6		636		SILTY CLAY, black silty clay with some sand, stiff, petroleum odor	2	75	4.0	6-3039-005	Laboratory Sample Obtained
7		635							
8		634		SANDY CLAY; brown sandy clay, wet					
9		633			3	75	1.0	--	Bedrock at 10.2 feet
10		632		BEDROCK, brown Silurian Dolomite					

LOG OF BORING SB-13

United States Postal Service
 Aurora Main Post Office
 525 North Broadway
 Aurora, Illinois
 DEI Project No. 01031-03

Date Started : 07/17/06
 Date Completed : 07/17/06
 Drilling Method : Geoprobe 6610DT
 Sampling Method : Direct Push 2" Split Spoon
 Driller : GeoServe

Logged By : M. Fisher
 Depth to Water : none encountered
 Project Number : 01031-03
 Page : 1 of 1
 Total Depth : 8.0 feet

Depth in Feet	Water Level	Surf Elev 643.51	GRAPHIC	DESCRIPTION	Field Samples	% Rec- overy	PID (units)	Lab No.	Remarks
0				TOPSOIL; greyish brown, dry, silty					
1		643		FILL; rust colored sandy fill material; very thin (0.2 ft) layer of black combusted material near top of section					
2		642		SILTY CLAY; brown-silty clay, medium plasticity	1	50	<1 0	6-3048-002	Laboratory sample obtained
3		641							
4		640		SILTY CLAY; same as previous section; some bedrock fragments near bottom of section					
5		639							
6		638			2	50	<1 0	--	Bedrock at 8.0 feet
7		637							
8		636		BEDROCK; brown Silurian Dolomite					



APPENDIX D – SITE PHOTOGRAPHS



PHOTO 1: Aurora MPO looking north from southwest corner of site.



PHOTO 2: Aurora MPO Customer Parking area.



PHOTO 3: Looking north along Broadway Avenue. Site to the right beyond brick wall.

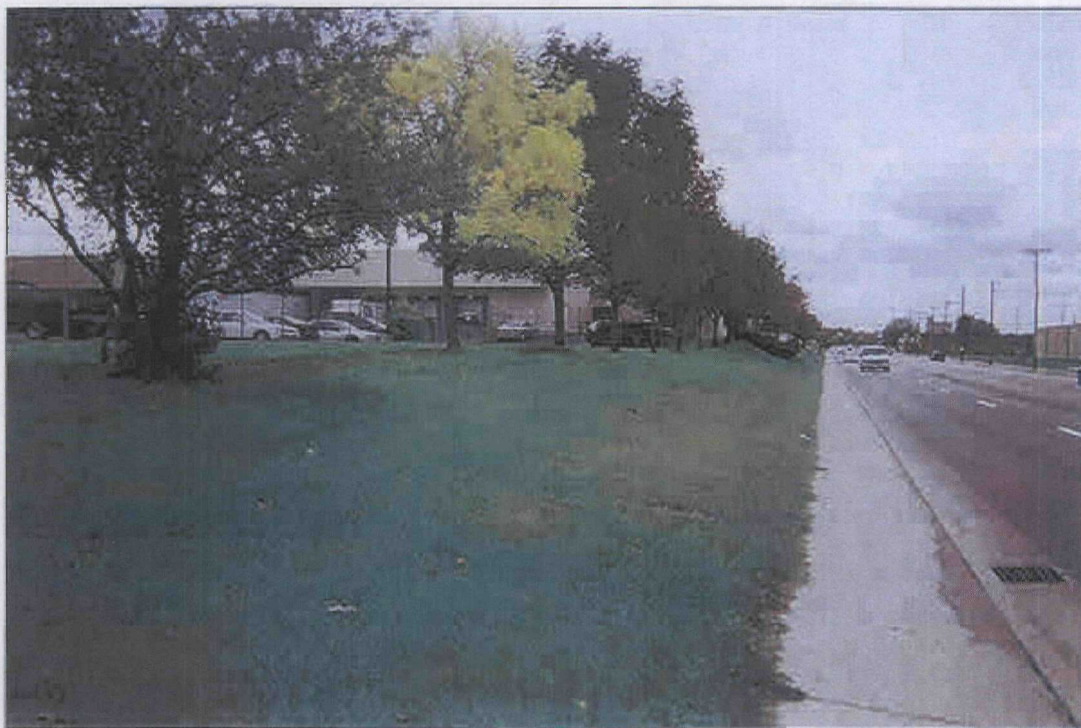


PHOTO 4: Looking south along Broadway Avenue. Site is on the left.



PHOTO 5: At southeast corner of site looking along eastern property boundary. Site is to the left, BNSF property to the right



PHOTO 6: Looking north from the southeast portion of site. USPS access road to the right, employee parking area to the left



PHOTO 7: Building on BNSF property to the east of the site with tracks in the background



PHOTO 8: Covered shipping area to the east behind the MPO building



PHOTO 9: Covered shipping area looking south



PHOTO 10: Monitoring well MW-1 (typical)



PHOTO 11: Shipping/receiving area on north end of MPO building



PHOTO 12: Looking to the east at the VMF



PHOTO 13: Looking SE at surface water retention area; VMF in background



PHOTO 14: Looking SE from NW corner of site; surface water retention area and VMF in background and BNSF access road in foreground.

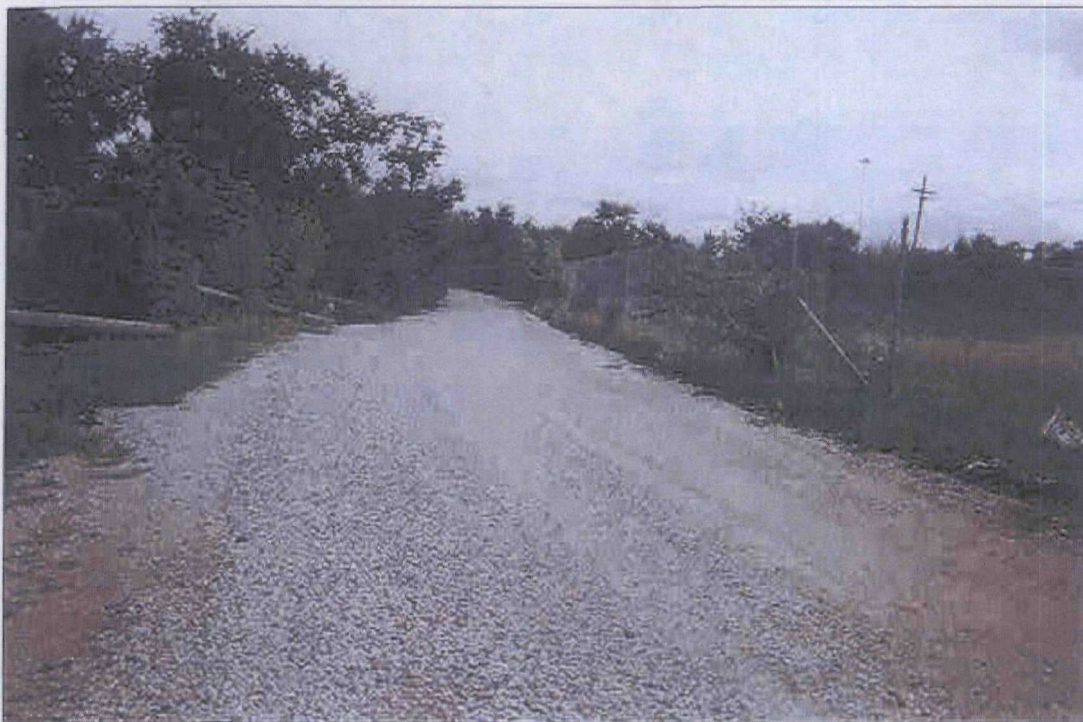


PHOTO 15: Looking east along the northern property boundary along the BNSF access road. Indian Creek to the left and the surface water retention area to the right.



PHOTO 16: Looking west from the NW corner of site at Indian Creek with Broadway Avenue bridge in the background.



**PHOTO 17: Looking east along Indian Creek with BNSF access road to the right.
Note the concrete channel embankment.**



PHOTO 18: Looking down from concrete embankment at Indian Creek



APPENDIX E – LABORATORY ANALYSIS SHEETS

Included in CD at End of Appendices



APPENDIX F – DEI SITE INVESTIGATION SOPs

Included in CD at End of Appendices



APPENDIX G – LABORATORY QA/QC PLAN

Included in CD at End of Appendices



APPENDIX H – WELL SURVEY REPORT

Included in CD at End of Appendices



APPENDIX I – ECOCAT SENSITIVE ENVIRONMENTS REPORT

Applicant: DPRA Inc
Contact: Jenny Jevnisek
Address: 332 Minnesota St, Suite E-1500
St Paul, MN 55101

IDNR Project #: 0905972
Date: 02/20/2009

Project: Aurora Post Office
Address: 525 North Broadway, Aurora

Description: Evaluation of "Sensitive Environments" 15 miles downstream of site for completion of HRS scoring

Natural Resource Review Results

This project was submitted for information only It is not a consultation under Part 1075

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Black-Crowned Night Heron (*Nycticorax nycticorax*)
River Redhorse (*Moxostoma carinatum*)

Location

The applicant is responsible for the accuracy of the location submitted for the project

County: Kane

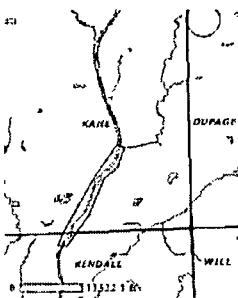
Township, Range, Section:

38N, 8E, 15	38N, 8E, 21
38N, 8E, 22	38N, 8E, 27
38N, 8E, 28	38N, 8E, 32
38N, 8E, 33	

County: Kendall

Township, Range, Section:

37N, 8E, 5



IL Department of Natural Resources Contact

Impact Assessment Section
217-785-5500
Division of Ecosystems & Environment

Disclaimer

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Applicant: DPRA Inc
Contact: Jenny Jevnisek
Address: 332 Minnesota St, Suite E-1500
St Paul, MN 55101

IDNR Project #: 0905975
Date: 02/20/2009

Project: Aurora PO
Address: 525 N Broadway, Aurora

Description: "Sensitive Environments" Evaluation

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Fox River INAI Site
Yorkville Prairie INAI Site
Yorkville Prairie Nature Preserve
Yorkville Prairie South Natural Heritage Landmark
Yorkville Railroad Prairie Natural Heritage Landmark
Greater Redhorse (*Moxostoma valenciennesi*)
River Redhorse (*Moxostoma carinatum*)

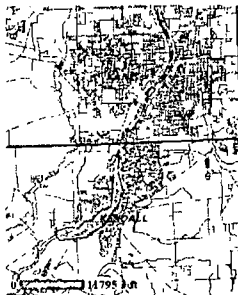
Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Kendall

Township, Range, Section:

37N, 7E, 13	37N, 7E, 23
37N, 7E, 24	37N, 8E, 5
37N, 8E, 8	37N, 8E, 17
37N, 8E, 18	37N, 8E, 19



IL Department of Natural Resources Contact
Impact Assessment Section
217-785-5500
Division of Ecosystems & Environment

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Applicant: DPRA Inc
Contact: Jenny Jevnisek
Address: 332 Minnesota St, Suite E-1500
St. Paul, MN 55101

IDNR Project #: 0905976
Date: 02/20/2009

Project: Aurora PO
Address: 525 N Broadway, Aurora

Description: "Sensitive Environments" Evaluation

Natural Resource Review Results

This project was submitted for information only It is not a consultation under Part 1075

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Emmons' Woods Land And Water Reserve INAI Site
Fox River INAI Site
Maramech Woods INAI Site
Silver Springs Fen INAI Site
Silver Springs Railroad Prairie INAI Site
Yorkville Forested Seep And Fen INAI Site
Yorkville Prairie INAI Site
Yorkville Seep INAI Site
Emmons' Woods Land And Water Reserve
Maramech Woods Nature Preserve
Silver Springs Railroad Prairie Natural Heritage Landmark
Yorkville Prairie Nature Preserve
Yorkville Prairie South Natural Heritage Landmark
Yorkville Railroad Prairie Natural Heritage Landmark
American Brooklime (*Veronica americana*)
American Brooklime (*Veronica americana*)
Bald Eagle (*Haliaeetus leucocephalus*)
False Bugbane (*Cimicifuga racemosa*)
Forked Aster (*Aster furcatus*)
Greater Redhorse (*Moxostoma valenciennesi*)
Heart-Leaved Plantain (*Plantago cordata*)
Henslow'S Sparrow (*Ammodramus henslowii*)
Osprey (*Pandion haliaetus*)
River Redhorse (*Moxostoma carinatum*)
River Redhorse (*Moxostoma carinatum*)
Sedge (*Carex bromoides*)

Sedge (*Carex bromoides*)

Showy Lady'S Slipper (*Cypripedium reginae*)

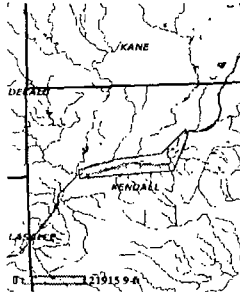
Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Kendall

Township, Range, Section:

36N, 6E, 1	36N, 6E, 2
36N, 6E, 3	37N, 6E, 25
37N, 6E, 34	37N, 6E, 35
37N, 6E, 36	37N, 7E, 22
37N, 7E, 23	37N, 7E, 26
37N, 7E, 27	37N, 7E, 28
37N, 7E, 29	37N, 7E, 30
37N, 7E, 31	37N, 7E, 32
37N, 7E, 33	37N, 7E, 34
37N, 7E, 35	



IL Department of Natural Resources Contact

Impact Assessment Section

217-785-5500

Division of Ecosystems & Environment

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***** Do Not Cite or Quote *****

* Pathways not assigned a score (explain): There are no potential points of entry for the Surface Water Overland/Flood Migration Component. There are no areas of observed contamination for the Soil Exposure Pathway. There is no observed release or potential for release for the Air Migration Pathway due to the cover of fill material present on the site.

TABLE 3-1 --GROUND WATER MIGRATION PATHWAY SCORESHEET

Factor categories and factors	Maximum Value	Value Assigned
Aquifer Evaluated: Unconsolidated Sand & Gravel		
Likelihood of Release to an Aquifer:		
1. Observed Release	550	550
2. Potential to Release:		
2a. Containment	10	
2b. Net Precipitation	10	
2c. Depth to Aquifer	5	
2d. Travel Time	35	
2e. Potential to Release [(lines 2a(2b + 2c + 2d)]	500	
3. Likelihood of Release (higher of lines 1 and 2e)	550	550
Waste Characteristics:		
4. Toxicity/Mobility	(a)	10000
5. Hazardous Waste Quantity	(a)	10
6. Waste Characteristics	100	18
Targets:		
7. Nearest Well	(b)	20
8. Population.		
8a. Level I Concentrations	(b)	0
8b. Level II Concentrations	(b)	0
8c. Potential Contamination	(b)	133
8d. Population (lines 8a + 8b + 8c)	(b)	133
9. Resources	5	5
10. Wellhead Protection Area	20	0
11. Targets (lines 7 + 8d + 9 + 10)	(b)	158
Ground Water Migration Score for an Aquifer:		
12. Aquifer Score [(lines 3 x 6 x 11)/82,500] ^c	100	18.96
Ground Water Migration Pathway Score:		
13. Pathway Score (S_{gw}), (highest value from line 12 for all aquifers evaluated) ^c	100	18.96

^a Maximum value applies to waste characteristics category

^b Maximum value not applicable

^c Do not round to nearest integer

TABLE 4-1 --SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET

Factor categories and factors	Maximum Value	Value Assigned
Watershed Evaluated: Fox River		
Drinking Water Threat		
Likelihood of Release:		
1. Observed Release	550	0
2. Potential to Release by Overland Flow:		
2a. Containment	10	
2b. Runoff	10	
2c. Distance to Surface Water	5	
2d. Potential to Release by Overland Flow [(lines 2a(2b + 2c)]	35	0
3. Potential to Release by Flood:		
3a. Containment (Flood)	10	0
3b. Flood Frequency	50	
3c. Potential to Release by Flood (lines 3a x 3b)	500	0
4. Potential to Release (lines 2d + 3c, subject to a maximum of 500)	500	0
5. Likelihood of Release (higher of lines 1 and 4)	550	0
Waste Characteristics:		
6. Toxicity/Persistence	(a)	
7. Hazardous Waste Quantity	(a)	0
8. Waste Characteristics	100	0
Targets:		
9. Nearest Intake	50	0
10. Population:		
10a. Level I Concentrations	(b)	0
10b. Level II Concentrations	(b)	0
10c. Potential Contamination	(b)	0
10d. Population (lines 10a + 10b + 10c)	(b)	0
11. Resources	5	5
12. Targets (lines 9 + 10d + 11)	(b)	5
Drinking Water Threat Score:		
13. Drinking Water Threat Score [(lines 5x8x12)/82,500, subject to a max of 100]	100	0
Human Food Chain Threat		
Likelihood of Release:		
14. Likelihood of Release (same value as line 5)	550	0
Waste Characteristics:		
15. Toxicity/Persistence/Bioaccumulation	(a)	0
16. Hazardous Waste Quantity	(a)	0
17. Waste Characteristics	1000	0
Targets:		
18. Food Chain Individual	50	20
19. Population		
19a. Level I Concentration	(b)	0
19b. Level II Concentration	(b)	0
19c. Potential Human Food Chain Contamination	(b)	0.031
19d. Population (lines 19a + 19b + 19c)	(b)	0.03
20. Targets (lines 18 + 19d)	(b)	2
Human Food Chain Threat Score:		
21. Human Food Chain Threat Score [(lines 14x17x20)/82500, subject to max of 100]	100	0
Environmental Threat		
Likelihood of Release:		
22. Likelihood of Release (same value as line 5)	550	0
Waste Characteristics:		
23. Ecosystem Toxicity/Persistence/Bioaccumulation	(a)	0
24. Hazardous Waste Quantity	(a)	0
25. Waste Characteristics	1000	0

Targets:

26. Sensitive Environments		
26a. Level I Concentrations	(b)	0
26b. Level II Concentrations	(b)	0
26c. Potential Contamination	(b)	1
26d. Sensitive Environments (lines 26a + 26b + 26c)	(b)	1
27. Targets (value from line 26d)	(b)	1

Environmental Threat Score:

28. Environmental Threat Score [(lines 22x25x27)/82,500 subject to a max of 60]	60	0
---	----	---

Surface Water Overland/Flood Migration Component Score for a Watershed

29. Watershed Score ^c (lines 13+21+28, subject to a max of 100)	100	0
--	-----	---

Surface Water Overland/Flood Migration Component Score

30. Component Score (S_{sw}) ^c (highest score from line 29 for all watersheds evaluated)	100	0
---	-----	---

^a Maximum value applies to waste characteristics category

^b Maximum value not applicable

^c Do not round to nearest integer

TABLE 4-25 --GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET

Factor categories and factors	Maximum Value	Value Assigned
Aquifer Evaluated: Fox River		
Drinking Water Threat		
Likelihood of Release to an Aquifer:		
1. Observed Release	550	550
2. Potential to Release:		
2a. Containment	10	
2b. Net Precipitation	10	
2c. Depth to Aquifer	5	
2d. Travel Time	35	
2e. Potential to Release [lines 2a(2b + 2c + 2d)]	500	0
3. Likelihood of Release (higher of lines 1 and 2e)	550	550
Waste Characteristics:		
4. Toxicity/Mobility	(a)	100
5. Hazardous Waste Quantity	(a)	10
6. Waste Characteristics	100	6
Targets:		
7. Nearest Well	(b)	0
8. Population:		
8a. Level I Concentrations	(b)	0
8b. Level II Concentrations	(b)	0
8c. Potential Contamination	(b)	0.4
8d. Population (lines 8a + 8b + 8c)	(b)	0.4
9. Resources	5	5
10. Targets (lines 7 + 8d + 9)	(b)	5.4
Drinking Water Threat Score:		
11. Drinking Water Threat Score [(lines 3 x 6 x 10)/82,500, subject to max of 100]	100	0.22
Human Food Chain Threat		
Likelihood of Release:		
12. Likelihood of Release (same value as line 3)	550	550
Waste Characteristics:		
13. Toxicity/Mobility/Persistence/Bioaccumulation	(a)	50000
14. Hazardous Waste Quantity	(a)	10
15. Waste Characteristics	1000	18
Targets:		
16. Food Chain Individual	50	
17. Population		
17a. Level I Concentration	(b)	0
17b. Level II Concentration	(b)	0
17c. Potential Human Food Chain Contamination	(b)	0.006
17d. Population (lines 17a + 17b + 17c)	(b)	0.01
18. Targets (lines 16 + 17d)	(b)	0
Human Food Chain Threat Score:		
19. Human Food Chain Threat Score [(lines 12x15x18)/82,500,subject to max of 100]	100	0
Environmental Threat		
Likelihood of Release:		
20. Likelihood of Release (same value as line 3)	550	550
Waste Characteristics:		
21. Ecosystem Toxicity/Persistence/Bioaccumulation	(a)	500000
22. Hazardous Waste Quantity	(a)	10
23. Waste Characteristics	1000	32
Targets:		
24. Sensitive Environments		
24a. Level I Concentrations	(b)	0
24b. Level II Concentrations	(b)	0
24c. Potential Contamination	(b)	0.0006

24d. Sensitive Environments (lines 24a + 24b + 24c)	(b)	0	
25. Targets (value from line 24d)	(b)		0
Environmental Threat Score:			
26. Environmental Threat Score [(lines 20x23x25)/82,500 subject to a max of 60]	60		0
Ground Water to Surface Water Migration Component Score for a Watershed			
27. Watershed Score ^c (lines 11 + 19 + 28, subject to a max of 100)	100		0.22
28. Component Score (S _{gs}) ^c (highest score from line 27 for all watersheds evaluated, subject to a max of 100)	100		0.22

^a Maximum value applies to waste characteristics category

^b Maximum value not applicable

^c Do not round to nearest integer

TABLE 5-1 --SOIL EXPOSURE PATHWAY SCORESHEET

Factor categories and factors	Maximum Value	Value Assigned
Likelihood of Exposure:		
1. Likelihood of Exposure	550	0
Waste Characteristics:		
2. Toxicity	(a)	10000
3. Hazardous Waste Quantity	(a)	10
4. Waste Characteristics	100	18
Targets:		
5. Resident Individual	50	0
6. Resident Population:		
6a. Level I Concentrations	(b)	0
6b. Level II Concentrations	(b)	0
6c. Population (lines 6a + 6b)	(b)	0
7. Workers	15	5
8. Resources	5	0
9. Terrestrial Sensitive Environments	(c)	0
10. Targets (lines 5 + 6c + 7 + 8 + 9)	(b)	5
Resident Population Threat Score		
11. Resident Population Threat Score (lines 1 x 4 x 10)	(b)	0
Nearby Population Threat		
Likelihood of Exposure:		
12. Attractiveness/Accessibility	100	0
13. Area of Contamination	100	5
14. Likelihood of Exposure	500	0
Waste Characteristics:		
15. Toxicity	(a)	
16. Hazardous Waste Quantity	(a)	0
17. Waste Characteristics	100	0
Targets:		
18. Nearby Individual	1	0
19. Population Within 1 Mile	(b)	0
20. Targets (lines 18 + 19)	(b)	0
Nearby Population Threat Score		
21. Nearby Population Threat (lines 14 x 17 x 20)	(b)	0
Soil Exposure Pathway Score:		
22. Pathway Score ^d (S_s), [lines (11+21)/82,500, subject to max of 100]	100	0

^a Maximum value applies to waste characteristics category

^b Maximum value not applicable

^c No specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to a maximum of 60

^d Do not round to nearest integer

TABLE 6-1 --AIR MIGRATION PATHWAY SCORESHEET

Factor categories and factors	Maximum Value	Value Assigned
Likelihood of Release:		
1. Observed Release	550	0
2. Potential to Release:		
2a. Gas Potential to Release	500	0
2b. Particulate Potential to Release	500	0
2c. Potential to Release (higher of lines 2a and 2b)	500	0
3. Likelihood of Release (higher of lines 1 and 2c)	550	0
Waste Characteristics:		
4. Toxicity/Mobility	(a)	
5. Hazardous Waste Quantity	(a)	10
6. Waste Characteristics	100	0
Targets:		
7. Nearest Individual	50	20
8. Population:		
8a. Level I Concentrations	(b)	0
8b. Level II Concentrations	(b)	0
8c. Potential Contamination	(c)	16
8d. Population (lines 8a + 8b + 8c)	(b)	16
9. Resources	5	0
10. Sensitive Environments:		
10a. Actual Contamination	(c)	0
10b. Potential Contamination	(c)	0
10c. Sensitive Environments (lines 10a + 10b)	(c)	0
11. Targets (lines 7 + 8d + 9 + 10c)	(b)	36
Air Migration Pathway Score:		
12. Pathway Score (S _a) [(lines 3 x 6 x 11)/82,500] ^d	100	0

^a Maximum value applies to waste characteristics category

^b Maximum value not applicable

^c No specific maximum value applies to factor. However, pathway score based solely on sensitive environments is limited to a maximum of 60.

^d Do not round to nearest integer